FINAL INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE OPPENHEIMER PAVILION AND AGRICULTURAL EVENT CENTER PROJECT

Prepared for:
CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

Prepared by:

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April 18, 2017

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INTRODUCTION

California Polytechnic State University, San Luis Obispo (the University or Cal Poly) proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Collectively, these improvements are referred to as the Peter and Mary Beth Oppenheimer Pavilion and Agricultural Event Center Project (project). Proposed project components include demolition of existing structures; upgrades to existing structures, such as the construction of a roof for existing equestrian pavilion (Pavilion 1) and an expansion to the existing hay barn located within the equine center; as well as the development of new facilities, including a new equestrian pavilion (Pavilion 2), foaling barn, stallion barn, animal health center, storage barn, and event center within the equine center, environmental horticultural sciences, and beef unit areas, and a new greenhouse and farm store located within the crops unit area. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation. An Initial Study is being completed at this time to provide preliminary evaluation of the potential impacts of the project, and to identify the type of formal CEQA document that will be required for the project. The level of specificity of environmental analysis is commensurate with the level of project detail available at the time of this writing. Where practical, this Initial Study identifies information that will be needed to initiate subsequent environmental review and measures that may help guide the development of project specifications.

PROJECT LOCATION AND SETTING

Cal Poly is located northeast of the City of San Luis Obispo, approximately midway between San Francisco and Los Angeles on California's central coast. The university campus occupies over 6,000 acres. University lands include range and agricultural areas as well as natural preserves, in addition to more developed areas. The more developed portion of campus is identified as the "campus instructional core" and includes agricultural support facilities, and academic, housing and administrative buildings. The campus instructional core is generally bound by Highland Drive on the north, California Boulevard on the west, Slack Street on the south, and foothills on the east.

The proposed project includes four conceptual phases for the planned improvements. Phases 1, 2, and 3 are generally located in the northern extent of the campus, within the areas defined in the Master Plan as the "Equine Unit", "Environmental Horticulture", and "Agriculture Pavilion". The Phase 1 project area encompasses approximately 25 acres, Phase 2 encompasses approximately 13 acres, and Phase 3 encompasses approximately 11 acres of the Oppenheimer project site. The Phase 1, 2, and 3 project areas currently support various equine, environmental horticultural, and beef unit facilities including a hay barn, mare barns, breeding barns, a stallion barn, horse barn, equine center, soil science greenhouse, lath houses, tractor barn, Garcia barn, greenhouses, shade house, bug house, pesticide storage, science labs, beef unit facilities, and residential structures. This project area is accessed via Village Drive, Via Carta, and unnamed, unpaved access roads. The Phase 1, 2, and 3 project areas are shown on Figures 1 and 2. Phase 4 of the project is located in the central portion of campus, northwest of the intersection of Highland Drive and Mt. Bishop Road within the area defined in the Master Plan as the "Crops Unit". The Phase 4 project area encompasses approximately 7 acres. The Phase 4 project area currently supports crop sciences support facilities, insecticide/herbicide/pesticide storage facilities, a chemical mixing lab, wastewater containment, greenhouses, and a crop sciences lab. This project area is bordered by active agriculture operations to the north and south and is accessed via Mt. Bishop Road to the east and Highland Drive and West Creek Road to the South. The Crop Sciences project site is shown on Figures 1 and 3.

Figure 1. Project Vicinity

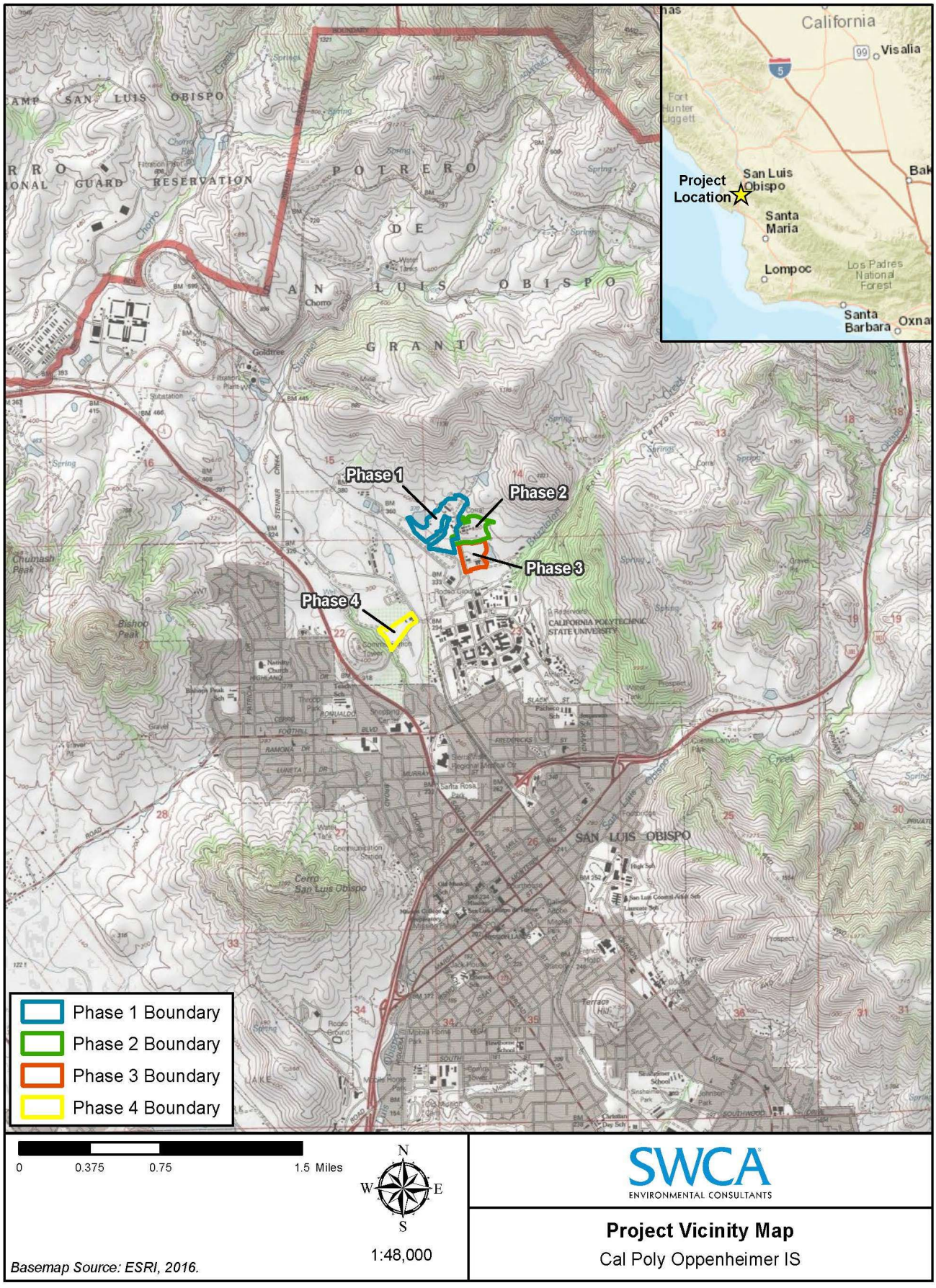

Figure 2. Phases 1–3 Location Map

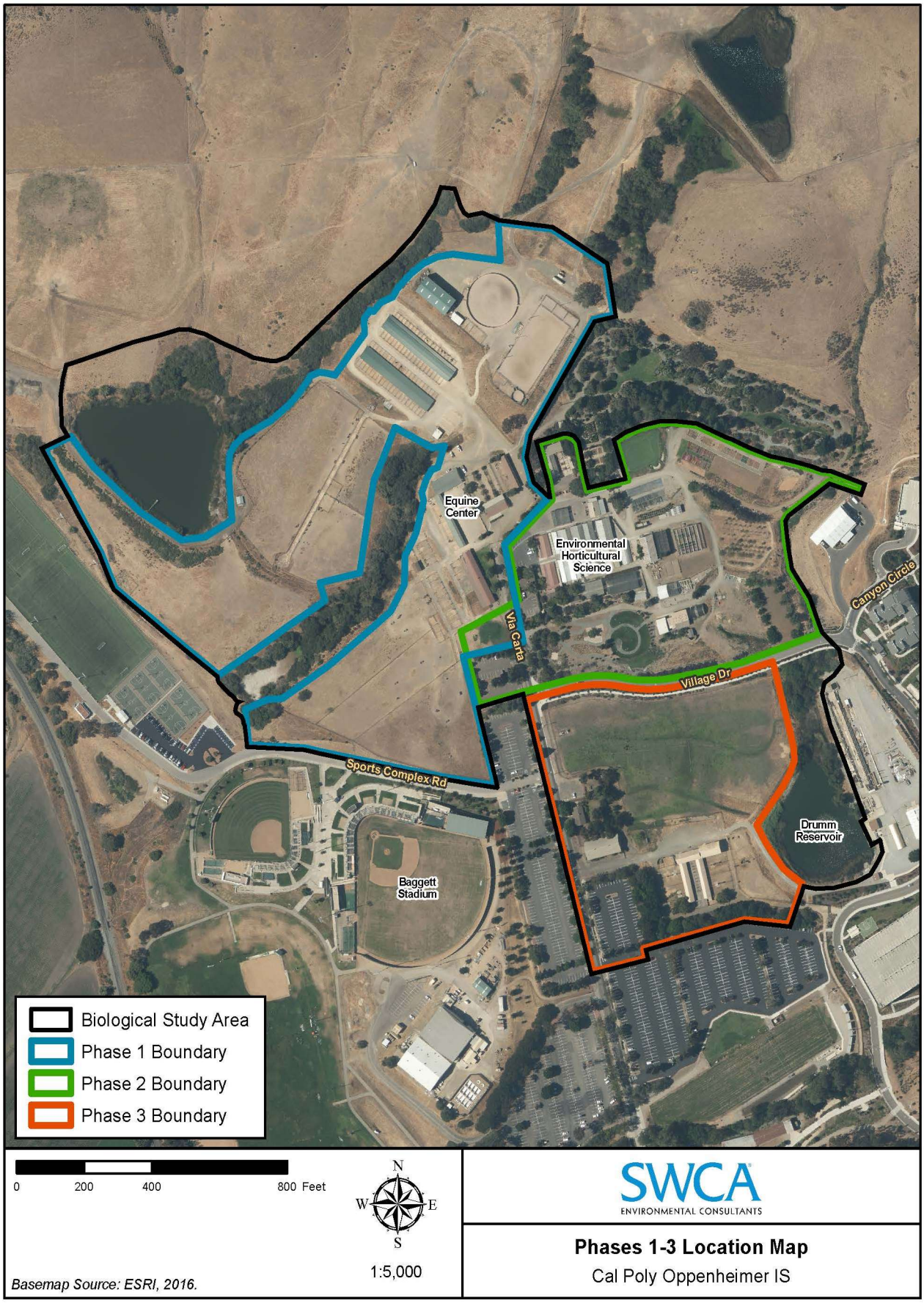

Figure 3. Phase 4 Location Map

PROJECT OBJECTIVES

The project is being pursued with the following objectives:

- Provide updated, expanded, and additional facilities on campus to support and enhance equestrian, horticultural, and crop sciences/agricultural education and activities;
- Continue to utilize campus lands for the "highest and best use" and increase land use efficiency in the campus core;
- Provide public services that support the University efficiently, with the flexibility to meet changing needs;
- Cluster uses that need to be, or benefit from being, near one another, and consolidate related activities where possible and focus on efficient and effective operations with continuous operational improvements;
- Relocate uses and/or activities displaced by new development; and
- Consider sustainability, alternative sources, self-sufficiency, life-cycle costing, and other strategies to minimize impacts on the environment.

PROJECT DESCRIPTION

Background

The 2001 Cal Poly Master Plan is the primary document governing land use and capital improvements on campus through the year 2020. The Master Plan includes several elements which guide development on campus, including, but not limited to: Campus Instructional Core, Residential Communities, Circulation and Parking. The Master Plan establishes land uses for the entire campus, and outlines principles to guide future development. The Master Plan does not set specific standards for development. However, development pursuant to the Master Plan is conditioned by mitigation measures outlined in the Master Plan Environmental Impact Report (EIR), as applicable. The Oppenheimer and Crop Sciences project sites are located within areas designated for "Outdoor Teaching and Learning" land uses (Land Use, San Luis Creek Watershed, Exhibit 5.1). The Outdoor Teaching and Learning element identifies the variety of "living laboratories" provided on the University campus (e.g., agricultural fields and units, ecological study areas, and design village), which are central to Cal Poly's mission and must remain integrated with the campus. The Master Plan includes one of the project components, Pavilion 2, identified as the "New Agriculture Pavilion". The Master Plan envisioned this facility as a multi-purpose agriculture pavilion within walking distance of the campus core on the site currently occupied by the old Beef Unit, Livestock Pavilion and Herdsman Hall, intended to accommodate lost access due to relocating the bull test to Chorro Creek Ranch and improve access from other animal units on the main campus. This facility is also intended to replace the existing Beef Unit, Beef Pavilion, Herdsman Hall and abattoir functions. The additional project components were not identified at the time the Master Plan was adopted.

Project Components

The project proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Proposed project components include demolition of existing structures, upgrades to existing structures, as well as the development of new facilities. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation. The project consists of four project phases: Phase 1 (Equestrian Pavilion, Foaling Barn, Stallion Barn), Phase 2 (Equestrian Pavilion, Animal Health Center, New Storage Building), Phase 3 (Agriculture Event Center), and Phase 4 (Crop Sciences). The project components associated with each project phase are summarized in Table 1 and described in detail below. The project components associated with Phases 1, 2, and 3 are portrayed on Figure 4. It should be noted that the project phases are numbered for the purposes of this Initial Study and are not numbered sequentially in the order by which they will be implemented.

Table 1. Project Phasing and Existing/Proposed Components

Existing Structure/Facility to be Demolished		Proposed Components to be Constructed	
Facility Name	**Area (ft^2)**	**New/Upgraded Project Component**	**Area (ft^2)**
Phase 1: Equestrian Pavilion, Foaling Barn, Stallion Barn (May 2017 – December 2017)			
032-E Stallion Barn	2,685 ft^2	Roof over existing Pavilion 1	56,000 ft^2
032-F Horse Barn	2,147 ft^2	Foaling Barn (Upgraded)	5,000 ft^2
032-O Equine Center (Mare Barn)	4,289 ft^2	Stallion Barn (Upgraded)	6,000 ft^2
--	--	Hay Barn Expansion	3,000 ft^2
--	--	Detention Basins	28,216 ft^2
PHASE 1 TOTAL DEMOLITION	*8,821 ft^2*	*PHASE 1 TOTAL CONSTRUCTION*	*98,216 ft^2*
Phase 2: Equestrian Pavilion, Animal Health Center, New Storage Building (September 2020 - September 2021)			
048-O Environmental Horticultural Science	30,978 ft^2	Equestrian Pavilion (Pavilion 2)	54,508 ft^2
048-A EHS Residence	1,549 ft^2	Animal Health Center	10,000 ft^2
048-B EHS Lath House	2,021 ft^2	Storage Barn	3,000 ft^2
048-C EHS Soil Science Greenhouse	3,400 ft^2	Pedestrian bridge	2,178 ft^2
048-D EHS Tractor Barn	1,600 ft^2	--	--
048-E Garcia Barn	2,111 ft^2	--	--
048-F EHS Solar Greenhouse	1,740 ft^2	--	--
048-H EHS Labs C &D	5,238 ft^2	--	--
048-I EHS Shade House	4,815 ft^2	--	--
048-J EHS Lath House (AI)	2,372 ft^2	--	--
048-K EHS Greenhouse	663 ft^2	--	--
048-L EHS Greenhouse	2,102 ft^2	--	--
048-M EHS Pesticide Storage	1,790 ft^2	--	--
048-MN EHS Bug House	1,121 ft^2	--	--
048-Q EHS Env. Hort Sci. D&P	1,0825 ft^2	--	--
PHASE 2 TOTAL DEMOLITION	*62,582 ft^2*	*PHASE 2 TOTAL CONSTRUCTION*	*69,686 ft^2*
Phase 3: Agricultural Event Center (September 2020 - September 2022)			
016-O Beef Unit	5,176 ft^2	Agricultural Event Center	88,150 ft^2
016-A Herdsman Hall	1,555 ft^2	Herdsman Hall (Replacement)	1,555 ft^2
PHASE 3 TOTAL DEMOLITION	*6,731 ft^2*	*PHASE 3 TOTAL CONSTRUCTION*	*89,705 ft^2*
Phase 4: Crop Sciences (May 2018 -September 2020)			
N/A	N/A	Greenhouse	60,000 ft^2
--	--	Farm Store (Interior Renovation)	0 ft^2
PHASE 4 TOTAL DEMOLITION	*0 ft^2*	*PHASE 4 TOTAL CONSTRUCTION*	*60,000 ft^2*
PROJECT TOTAL	**78,134 ft^2**	**PROJECT TOTAL**	**317,607 ft^2**

Figure 4. Phases 1–3 Demolition Plan

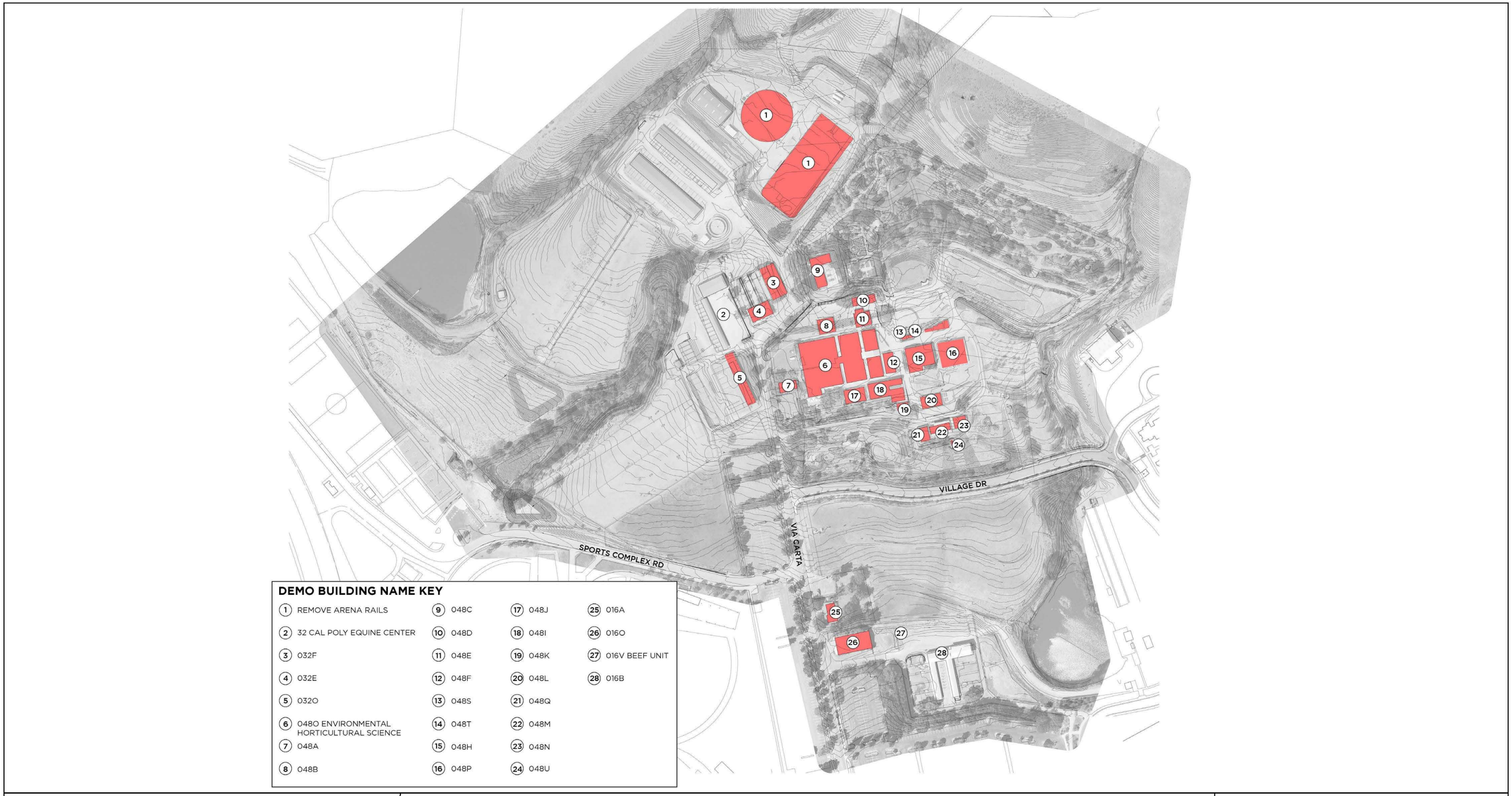

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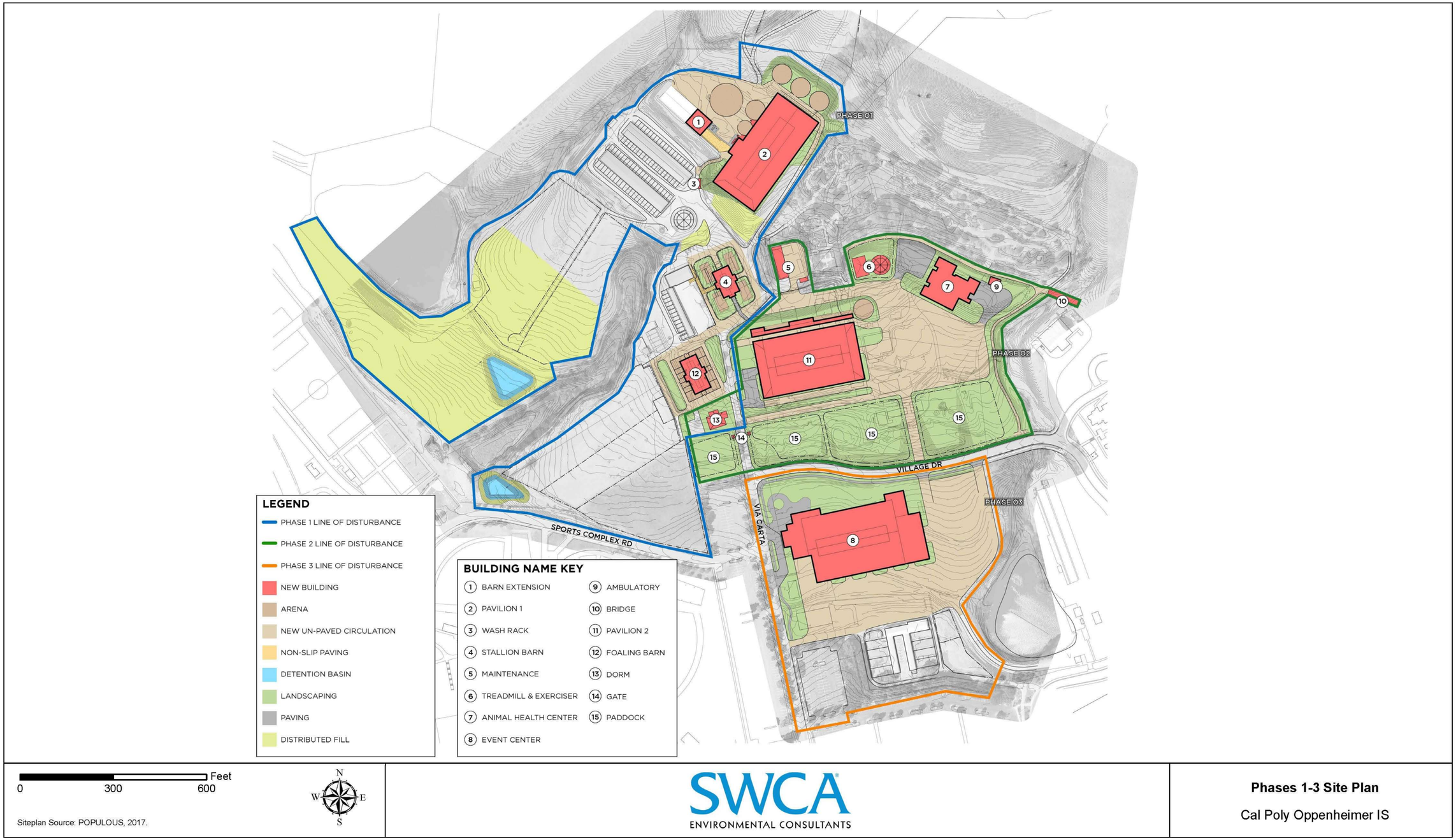
Figure 5. Phases 1–3 Site Plan



Siteplan Source: POPULOUS, 2017.

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Phases 1-3 Site Plan

Cal Poly Oppenheimer IS

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Phase 1: Equestrian Pavilion, Foaling Barn, Stallion Barn

Phase 1 is estimated to commence construction in May 2017 and be completed in December 2017. Phase 1 includes the demolition of three existing structures, 032-E Stallion Barn, 032-F Horse Barn, and 032-O Equine Center (Mare Barn), all located within the campus Equine Center. The total area of structures to be demolished encompasses approximately 8,821-ft². New project components to be constructed during Phase 1 of the proposed project include a 56,000-ft² roof over the existing equestrian pavilion (Pavilion 1), a new 5,000 ft² foaling barn, a new 6,000-ft² stallion barn, a 3,000 ft² expansion to the existing hay barn, and two new detention basins to control surface water runoff from the Phase 1 project area. Phase 1 would also include the construction of new unpaved access roads to provide circulation for vehicles, new horse arenas, and landscaped areas.

Phase 2: Equestrian Pavilion, Animal Health Center, New Storage Building

Phase 2 is estimated to commence construction in September 2020 and be completed in September 2021. Phase 2 includes the demolition of 15 existing Environmental Horticultural Science support facilities, including a residential structure, lath houses, greenhouses, barns, and storage structures. The total area of structures to be demolished encompasses approximately 62,582-ft². New project components to be constructed during Phase 2 of the proposed project include a new 54,580-ft² equestrian pavilion (Pavilion 2), a new 10,000 ft² animal health center, a new 3,000-ft² storage barn, and a new pedestrian bridge above an unnamed drainage. Phase 2 would also include the construction of new unpaved access roads to provide circulation for vehicles, new horse paddocks, and landscaped areas. The largest project component associated with Phase 2 is the new equestrian pavilion (Pavilion 2), which is expected to include approximately 45,000 ft² of covered arena floor, 1,158 ft² of seating/circulation areas, 200 ft² of tack walls, 1,200 ft² of pony lines, 3,600 ft² of holding pens, 620 ft² of restroom areas, 500 ft² for an equine managers office, 1,500 ft² of classroom space, and 80 ft² of mechanical/electrical utilities. The heights of all new structures proposed under Phase 2 are expected to be between 18 and 30 feet.

Phase 3: Agricultural Event Center

Phase 3 is estimated to commence construction in September 2020 and be completed in September 2022. Phase 3 includes the demolition of two existing structures, including 016-O Beef Unit and 016-A Herdsman Hall, both located within the campus Beef Unit. The total area of structures to be demolished encompasses approximately 6,731 ft². New project components to be constructed during Phase 3 of the proposed project include the new 88,150-ft² agricultural event center and associated parking facilities and would replace the Herdsman Hall proposed to be demolished. The new agricultural event center would be two levels and approximately 66 feet in height. The upper level would encompass 27,218 ft², supporting 10,000 ft² of area seating (approximately 1,500 seats), 2,610 ft² of restrooms, 7,908 ft² for a circulation concourse, 1,250 ft² of concessions, 800 ft² for an event/ticketing office, 4,100 ft² for a multi-use classroom, and 200 ft² for custodial services/storage space. The lower level would encompass 60,860 ft², supporting 27,800 ft² of arena floor, 1,800 ft² of show office/official lounge area, 1,160 ft² for circulation area, 200 ft² for restrooms, 8,400 ft² for staging areas, 2,000 ft² for arena storage space, 2,400 ft² for open penning areas, 500 ft² for a trash room, 400 ft² for building support, and 6,200 ft² for a return alley. The Agricultural Event Center would support The Herdsman Hall replacement structure would be the same size as the existing structure (1,555 ft²). Phase 3 would also include the construction of new unpaved access roads to provide circulation for vehicles, drainage control facilities, and landscaped areas.

Phase 4: Crop Sciences

Phase 4 is estimated to commence construction in May 2018 and be completed in September 2020. The Phase 4 project area encompasses approximately 5.5 acres located within the campus Crops Unit area. Phase 4 includes repurposing a portion of the existing Crop Science Complex (Building 017O – Crop Science) with a new farm store, as well as the construction of new 60,000 ft² state of the art research, production greenhouses and associated support facilities to replace the greenhouse structures that would be demolished under Phase 2 of the project. The new greenhouse and support facilities are expected to include a new fruit and vegetable processing and research facility, a new plant sciences teaching and research laboratory building, and a new storage facility for restricted products and equipment. These project components are conceptual and have not undergone design yet. The Phase 4 project components would be accessed via Mt. Bishop Road to the east and Highland Drive and West Creek Road to the South.

It is expected that the greenhouse may include retractable roofing systems, open-ended hoop houses, and state of the art production greenhouses with automated hydroponic, lighting, and irrigation systems to create controlled environments within which specialized ornamental and food plants can be grown. The fruit and vegetable processing facility would contain processing lines that are representative of current state of the art technology, including automated cull detection and grading equipment, cleaning, sorting and packing apparatuses. The facility would represent the state of current technology in terms of food and worker safety. This facility would be able to accommodate both conventional and organic processing. The plant science teaching and research building would consist of labs, a honey room, and open space for the periodic processing of field collected samples that is routine in plant science research. The facility would support research in the burgeoning area of the soil, water, air, and plant interface accommodating scientists from all four of those disciplines. The storage facility would be used to store pesticides and controlled products, as well as farming equipment that is sensitive to the elements. The existing Building 017O – Crop Science would be retained and converted into a farm store where all agricultural products produced on campus can be sold in one place. This would include dairy, meat, eggs, processed food products (jams, chocolate, BBQ sauces, etc.), fruits and vegetables, ornamental plants, a tasting room for Cal Poly produced wine, beer and spirits, and a dairy bar to serve ice cream products. The University envisions maintaining and upgrading the external structure while remodeling the interior to create the store.

Construction

Construction activities associated with the proposed project would encompass approximately 25.07 acres for Phase 1, 12.62 acres for Phase 2, 11.15 acres for Phase 3, and 6.78 acres for Phase 4, totaling 55.62 acres for the entire project. Construction activities anticipated to be required include demolition of existing structures (Phases 1, 2, and 3); excavation and deposition of fill material, grading; paving; material stockpiling; the use, movement, and staging of construction equipment; and addition of construction personnel during the construction period of each project phase. As discussed previously, the phasing of construction of the project is anticipated to occur in the following phases:

- Phase 1: Construction is estimated to require 8 months and take place between May and December 2017;
- Phase 2: Construction is estimated to require 1 year and take place between September 2020 and September 2021;
- Phase 3: Construction is estimated to require 2 years and take place between September 2020 and September 2022; and,
- Phase 4: Construction is estimated to require approximately 2 years and two months and take place between May 2018 and September 2020.

The University will implement sedimentation and erosion control measures in addition to a Regional Water Quality Control Board-approved Stormwater Pollution Prevention Plan (SWPPP). The sedimentation and erosion control plan will include typical devices including straw wattles, check dams, fabric blankets, and silt fencing. All erosion control materials will be biodegradable and natural fiber. Long-term drainage and stormwater management plans have not yet been developed. Water for dust suppression would be supplied by the University. Drinking water and portable toilets for construction activities are anticipated to be provided by the construction manager.

Operation

Operation of the new facilities proposed under Phases 1, 2, 3, and 4 would not increase current enrollment projected in the Master Plan, but would enhance and continue to support existing land uses for students. At full buildout, operation of the proposed project is expected to require a maximum of three to five new employees across all project phases. Implementation of the proposed project could generate increased trips within the project area resulting from increased use of the new facilities by existing students. The proposed project is expected to have a zero net increase in water demand across all project phases. Phase 1 would replace existing water fixtures with more efficient fixtures and would not increase the existing number of fixtures. Phase 2 would also replace existing water fixtures with more efficient fixtures and would reduce the number of water fixtures through the demolition of the existing greenhouse facilities. The fixtures to be removed through the demolition of the greenhouse facilities would be replaced with the same number of more efficient fixtures in the new greenhouse facilities proposed under Phase 4. Phase 3 would replace existing irrigated fields with the new

Agricultural Event Center, which will be equipped with water efficient fixtures and is expected to result in less water consumption than the existing demand of the irrigated fields. The existing infrastructure that provides non-potable water to livestock watering troughs would be used to continue to support livestock operations and establish the new landscaping.

The University would implement an Integrated Pest Management Plan, which may include the following: weed control, including use of native ground cover, livestock grazing to control grasses, manual harvest, and use of herbicides if necessary; vegetative management for fuel load reduction; and, insect, pest, and disease management including manual trapping of vertebrate pests, eradication, use of Environmental Protection Agency (EPA)-approved rodenticides.

The Agricultural Event Center proposed under Phase 3 is expected to hold approximately 30 special agricultural events per year, predominately during the regular school year. The events are proposed as follows:

- 15 weekend events will serve up to 750 attendees;
- Five weekday events starting after 6:00 PM will serve up to 1,000 attendees;
- Five weekday events starting after 6:00 PM will serve up to 1,500 attendee; and,
- Five campus-centric events (90 percent of attendees from on-campus locations) serving up to 1,000 attendees.

The largest events will serve up to 1,500 attendees up to five times per year. Because they will start after 6:00PM, they will avoid the peak hour of travel on State Route 1/Santa Rosa Street, which occurs from 3:30-4:30 PM.

The proposed project includes the preparation and implementation of a Travel Demand Management (TDM) Plan to ensure operational traffic associated with the recurring special events does not exceed 100 trips during the peak hour of adjacent streets. The TDM Plan shall be prepared prior to, and implemented during, operation of Phase 3. The TDM plan may include, but is not limited to, the following measures:

- Implement shuttle/transit service from off campus locations during special events. Likely pickup locations include hotels associated with the event, the downtown transit center, and on-campus housing complexes.
- Schedule arrivals/departures for exhibitors and participants with large vehicles and trailers to occur well before the event starts/ends and outside of the peak hour of adjacent streets to spread the event trips over a longer period of time and minimize the impacts of vehicles with trailers.
- Implement manual traffic control at on-campus intersections and signage directing attendees and participants to the appropriate parking and staging areas.
- Coordinate with Caltrans and the City of San Luis Obispo to schedule event start and end times outside of the peak travel periods on adjacent streets.
- Ensure special events do not occur simultaneously with other large events on campus, such as sporting events or cultural events at the Performing Arts Center.
- Inform event participants and attendees of shuttle service availability, parking, and other aspects of the TDM plan.
- Monitor and adjust the TDM plan following the initial events to effectively manage the transportation demand.

PURPOSE OF THE INITIAL STUDY

An initial study is an informational document used in planning and decision making. The initial study is not intended to recommend approval or denial of the project. The Trustees have prepared this initial study to determine if the project would have a significant effect on the environment. The purposes of the initial study are to:

- Provide the lead agency with information to use in deciding whether to prepare an EIR or negative declaration;
- Enable the lead agency to modify the project to avoid adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
- Document the factual basis for the finding, in a negative declaration, that a project will not have a significant impact on the environment.

APPLICABLE REGULATIONS

The current Cal Poly Master Plan (2001) provides the framework for planning and policy guidance for development on campus. The Master Plan EIR includes mitigation applicable to development on campus. Master Plan mitigation measures are incorporated into the project description, and are updated where noted. Other, site-specific mitigation is recommended in this document which clarifies measures adopted as part of the Master Plan EIR. The project does not increase current enrollment projected in the Master Plan. Where the project is consistent with the Master Plan and no new substantive information exists, this is noted and analysis references the Master Plan and Master Plan EIR documents.

NPDES Phase II Regulations (Non-point Source Stormwater Pollution Prevention). The project encompasses an area more than one acre in size; a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project pursuant to the approval of the Regional Water Quality Control Board (RWQCB). The SWPPP will outline site management practices for site preparation, construction, and post-construction phases of the project. The project is also subject to the State Water Resources Control Board Water Quality Order No. 2013-0001-DWQ, National Pollutant Discharge Elimination System General Permit No. Cas000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (2013 General Permit) as implemented by Cal Poly. Cal Poly applies the Central Coast Post Construction Requirements (PCRs).

INITIAL STUDY ENVIRONMENTAL CHECKLIST

This section discusses potential environmental impacts associated with approval of the proposed project.

Required Information

Project Title: Oppenheimer Pavilion and Agricultural Event Center Project

Lead Agency: California State University Board of Trustees
401 Golden Shore
Long Beach, CA 90802-4210

Contact Person: Julie Hawkins
Facilities Planning and Capital Projects
Building 70
Cal Poly State University
San Luis Obispo, CA 93407
(805) 756-6563

Project Location: Equine Center, Environmental Horticultural Science Unit, Beef Unit, and Crops Unit, Cal Poly State University, San Luis Obispo

Project Sponsor: Facilities Planning, Cal Poly Foundation

Master Plan Designation: The project area is designated as areas suitable for Outdoor Teaching and Learning

Project Description: The project proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Proposed project components include demolition of existing structures, upgrades to existing structures, as well as the development of new facilities, including a new Agricultural Event Center. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation. The project consists of four project phases: Phase 1 (Equestrian Pavilion, Foaling Barn, Stallion Barn), Phase 2 (Equestrian Pavilion, Animal Health Center, New Storage Building), Phase 3 (Agriculture Event Center), and Phase 4 (Crop Sciences).

Surrounding Land Uses and Setting: The Phase 1 project area is surrounded by vacant land and the Indonesian Reservoir to the north, and drainages to the north, vacant land, Shepard Reservoir, and athletic facilities to the west, Sports Complex Road and athletic facilities to the south, and Via Carta and Village Drive, horticultural sciences facilities, and vacant land to the east. The Phase 2 project area is surrounded by vacant land and Indonesian Reservoir to the north, equine center facilities and Via Carta to the west, irrigated fields, the Drumm Reservoir and Village Drive to the south, and campus residential housing to the east. The Phase 3 project area is surrounded by Village Drive and Environmental Horticultural Sciences facilities to the north, Via Carta and athletic facilities to the west, parking facilities to the south, and the Drumm Reservoir and Village Drive to the east. The Phase 4 project area is surrounded by active agricultural fields to the north, West Creek Road and Stenner Creek to the west, Highland Drive and agricultural lands to the south, and Mt. Bishop Road, vacant land, Brizzolara Creek, and athletic facilities to the east.

California State University (CSU) and Other Public Agencies whose approval will be sought:
California State University: Approval of Master Plan revision, schematic plans, and related actions; Regional Water Quality Control Board; County of San Luis Obispo Air Pollution Control District; and other approvals as necessary.

CEQA Guidance

Appendix G of the State CEQA Guidelines was used in answering the checklist questions:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the discussion. A "No Impact" answer is adequately supported if the discussion shows that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained when it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from earlier analyses may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (State CEQA Guidelines Section 15063[c][D]). In this case, a brief discussion should identify the following:
    a) *Earlier Analysis Used*. Identify and state where they are available for review.
    b) *Impacts Adequately Addressed*. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) *Mitigation Measures*. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. *Supporting Information Sources*: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance

Identification of the potential for residual significant adverse environmental impacts would trigger the need for preparation of an EIR. For issue areas in which no significant adverse impact would result or impacts would be reduced to a less-than-significant level by mitigation, further analysis is not required.

	Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
I.	**AESTHETICS**				
	Would the project:				
a.	Have a substantial adverse effect on a scenic vista?			X	
b.	Substantially damage scenic resources, including, but not limited to, tree, rock outcroppings, and historic buildings within a scenic state highway?			X	
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in this area?		X		

Background

This section is based on the Visual Assessment prepared for the proposed project and included in Appendix A (SWCA 2017). The main Cal Poly campus occupies over 6,000 acres at the northeastern edge of the City of San Luis Obispo, at the base of the western foothills of the Santa Lucia Range in central San Luis Obispo County. The visual character of the campus is influenced by both built and natural elements. Located adjacent to the City of San Luis Obispo, the campus and project site are also situated at the eastern end of the highly scenic Chorro Valley, which runs from San Luis Obispo northwest to Morro Bay and the Pacific Ocean. University lands include range and agricultural areas as well as natural preserves, in addition to more developed areas. The more developed portion of campus is identified as the "campus instructional core" and includes agricultural support facilities, and academic, housing and administrative buildings. The campus instructional core is generally bound by Highland Drive on the north, California Boulevard on the west, Slack Street on the south, and foothills on the east.

Northwest of campus, the Chorro Valley is generally defined by the Santa Lucia hills and the Cuesta Ridge to the northeast, and the Morros, a series of distinct mountain peaks rising up from the valley to the southwest. The Morros are recognized in County of San Luis Obispo planning documents as highly scenic visual resources that should be protected (County of San Luis Obispo 2010), and the Cal Poly Master Plan Final Environmental Impact Report (EIR) identifies the Morros as a scenic resource that provides a dramatic backdrop to the University (California State University 2001).

Highway 1 through the Chorro Valley and continuing north to the city of Monterey in Monterey County is both a Designated State Scenic Highway and an All-American Road in the National Scenic Byway system. Each of these designations indicate a high degree of scenic quality within the highway's view corridor.

Project Visibility. The proposed project components would be visible from few public viewpoints in the surrounding area. This limited visibility would be mostly from Highway 1 and from Bishop Peak dedicated open space and recreation trails as follows:

Highway 1. The Phases 1, 2, and 3 project areas would be partially visible along an approximately 800-foot section of Highway 1. The viewing distance from the highway to the project site would be approximately 0.8 mile, seen to the north and generally perpendicular to the direction of travel. The total duration of visibility along Highway 1 would be approximately 9 seconds for motor vehicles travelling at the posted speed limit. An average of 24,500 vehicles pass by the project site each day (Caltrans 2014 data). Bicyclists travelling at a speed of 15 miles per hour could potentially have views of the project for approximately 36 seconds.

From Highway 1, the project would occupy a small percentage of the overall viewshed and would be seen in the context of the western portion of campus, including several agricultural buildings and support facilities. Various sports fields, including Bob Janssen Field and Baggett Stadium, would be visible in the project vicinity, and multi-story campus housing facilities would be part of the background view, with the open space and natural areas of the Santa Lucia foothills in the distance.

As seen from this viewing location, much of the Phases 1, 2, and 3 project areas would be visually blocked by intervening vegetation, topography, or a combination of both. The viewing distance of nearly 1 mile would also reduce noticeability of the project. The Phase 4 project area would not be visible from Highway 1.

Bishop Peak. The Phases 1, 2, and 3 project areas can be easily seen from sections of the public recreation trails throughout Bishop Peak and the Bishop Peak Natural Preserve. Because of the elevated viewing position of these viewpoints, the project would be visible in the context of the overall campus and the greater Chorro Valley, including the highly scenic Morros and variety of topographic and natural vegetative elements. The viewshed would also include the overall patterns of land use development including the City of San Luis Obispo, the California Men's Colony, Camp San Luis, and others. From Bishop Peak, the project would be seen at a viewing distance of approximately 1.5 to 2 miles. Although visible, because of the panoramic viewshed, the project would occupy a relatively small percentage of the overall scenery. The Phase 4 project area would be substantially blocked by Radio Hill on campus and would have very limited visibility from Bishop Peak recreational trails.

Other Viewpoints. Due to the proposed locations of the project phases near the center of campus, viewing distances, intervening topography, development and vegetation, the project components would not be readily seen throughout the surrounding community, if at all. If seen, because of the viewing distances and project context, any views from these areas would include the existing campus and the adjacent city, which would serve to minimize noticeability of the project.

All of the proposed project areas would be visible to the public while travelling on Amtrak passenger trains. From the railroad tracks, the projects would be seen in the context of the developed portion of the campus, at a viewing distance of less than one-half mile.

Discussion of Checklist Answers

a. Scenic vistas are generally defined as high-quality views displaying good aesthetic and compositional value that can be seen from public viewpoints. If the project substantially degrades the scenic landscape as viewed from public roads, or in particular designated scenic routes, or from other public or recreation areas, this would be considered a potentially significant impact on the scenic vista. Scenic vistas related to the viewing experience associated with this project include views of the Morros, the Santa Lucia Mountains and foothills, Cuesta Ridge, important rock outcroppings, patterns of natural vegetation, and predominant pastoral land.

As seen from Highway 1, the project would not block or reduce existing views of the Morros, Santa Lucia foothills, or other important landforms. The tallest of the proposed structures would be Pavilion 1 proposed under Phase 1, Pavilion 2 proposed under Phase 2, and the Agricultural Event Center proposed under Phase 3 of the proposed project. The highest point of those structures would be Pavilion 1 at approximately 480 feet above sea level, while Bishop Peak and the Morros rise to approximately 1,500 feet and the Santa Lucia Foothills reach more than 2,000 feet above sea level. As a result, the project would only be seen at the lower portion of the vista from Highway 1. The project would be visually back-dropped by other campus development, and would have no effect on views to the surrounding hills or ridgelines (refer to Figure 8 in Appendix A). In addition, views of scenic pastoral land would not be diminished since the project would be seen generally as infill among existing agricultural facilities.

As seen from viewpoints on Bishop Peak the project would be hundreds of feet below the viewer and would not extend into the surrounding viewshed or effect scenic vistas (refer to Figure 6 in Appendix A). The project would be seen in the context of the overall campus and city development and would have no effect on the panoramic scenic vista.

The project would build structures which would range in height from 18 to 66 feet and would be seen from the surrounding area but would not interfere with views. Specifically, Pavilion 1 and Pavilion 2

would be potentially visible from a short section of Highway 1 and from viewpoints on Bishop Peak. However, because of the viewing distances and structures' low elevations relative to the surrounding hills, they would occupy only a very small portion of the viewshed and would not distract from the overall visual quality. Therefore, impacts on the scenic vista would be less than significant.

b. A scenic resource is a specific feature or element with a high degree of memorability or landmark characteristics that contributes to the high visual quality of the corridor. From along Highway 1 through the Chorro Valley, the Morros, Cuesta Ridge, unique rock outcroppings, significant groupings of trees, and certain old ranch buildings are considered the primary scenic resources. The project would result in a significant impact if it were to damage or have a substantial negative effect on views of any of those specific resources as seen from Highway 1, an Officially Designated State Scenic Highway.

Although a portion of the project would be seen from Highway 1, particularly Pavilion 1 and Pavilion 2, those structures would not block views of the Santa Lucia foothills, unique rock outcroppings, significant groupings of trees, or any historic-looking ranch buildings. Potential views of the project would exist along an approximately 800-foot section of Highway 1. Direct views of the surrounding hills and other scenic resources would be unaffected by the project. The project would occupy a small portion of the mid-ground context for those views, and would result in no reduction of the compositional value of the scenic resource setting.

The project would add structures into the distant mid-ground landscape as seen from a short section of Highway 1. However because of the viewing distance and proposed structures' low elevations relative to the surrounding scenic hillsides, they would occupy only a very small portion of the viewshed and would not distract from the overall visual quality; therefore, impacts on scenic resources as seen from the State Scenic Highway would be less than significant.

c. The visual character of the project area and its surroundings is defined by both built and natural elements. Much of the natural visual setting is established by the combination of the dramatic topography and mountain peaks along with the open space and pastoral agriculture of the Chorro Valley and western portion of the Cal Poly campus.

The City of San Luis Obispo and the Cal Poly campus core help establish a generally urban character through the eastern end of the valley. In the project vicinity and the areas west of the campus core, the visual character transitions to a more open, working-agricultural setting. Throughout this area, a variety of agricultural labs, support buildings and fields are interspersed with athletic facilities. As seen from the surrounding community, intervening topography, mature vegetation and other development substantially limit views to the project area and the adjacent, mostly agricultural landscape.

A few of the proposed structures at the westernmost portion of the project would be visible from Highway 1. Of these, the area around Pavilion 1 and Pavilion 2 would be the most visible. Pavilion 2 would be only partially visible through the intervening vegetation. The Agricultural Event Center would be almost completely screened from view and would not be discernable from the surrounding landscape context. From viewpoints on Highway 1, the Phase 4 project area would not be seen.

From elevated public viewpoints such as the trails on and near Bishop Peak, the Phases 1, 2, and 3 project areas would be seen at a distance of approximately 1.5 to 2 miles, in the context of the surrounding campus. Although visibility of the Phase 4 project area from elevated viewpoints would be substantially blocked by Radio Hill and other topography and vegetation, portions of it could be potentially seen depending on the specific type of development proposed. However, even if visible, the Phase 4 project area would be viewed in the context of nearby development and agriculture-related uses.

The primary scenic value of the project site is that it provides a semi-pastoral and agricultural mid-ground to the dramatic hillside backdrop of the Morros and Santa Lucia mountains. The project area and its surroundings visually support the agricultural character and heritage valued by Cal Poly, San Luis Obispo County, and the City of San Luis Obispo.

In general, existing development in the project vicinity is visually subordinate to the rural and agricultural character of the overall landscape. Although portions of the project would be visible from public viewpoints, these viewpoints would be limited to a short section of Highway 1, and to the Bishop Peak recreational areas. Where visible, the adjacent hills and mountain peaks rising up to the east would tend to dominate the views, and to a great degree, define the overall visual character. The project elements, when seen, would be visually compatible with the working-agriculture setting of that part of campus. In addition, it is expected that to most casual observers, the proposed project buildings, paddocks and accessory structures would visually blend with the surroundings and would not be readily noticeable. The project components would be constructed in phases, which would allow a gradual transition from the current visual condition to project build-out.

Because of the project's location, visibility from public viewpoints would be limited. In addition, where visible, although the project would add new structures to the area, they would not appear out of place in the existing working-agricultural setting. Combined with the visual dominance and character-defining qualities of the surrounding hills, the project would be subordinate to the larger viewshed. Therefore, impacts on the visual character and quality of the site and its surroundings would be less than significant.

d. The project would result in a significant impact if it subjects public viewing locations to a substantial amount of point-source lighting visibility at night, a noticeable spillover effect into the nighttime sky, or a substantial amount of daytime glare into the surrounding area. The height and placement of lighting, source of illumination, and fixture types combined with viewer locations, adjacent reflective elements, and atmospheric conditions can affect the degree of change to nighttime views. If the project results in direct visibility of a substantial number of lighting sources, allows a substantial amount of light to project toward the sky, or creates a substantial amount of daytime glare, significant lighting impacts would result.

Existing sources of night lighting in the Phases 1, 2, and 3 project areas include a few buildings associated with the Equine and Environmental Horticultural Science units and the parking lots along Via Carta. The elevated sports field lighting of Bob Janssen Field and Baggett Stadium are in the immediate vicinity of Pavilion 2 and can be seen from a wide area of the campus. As viewed from Highway 1, the lights of the multi-story student residences and the parking garages can be seen directly behind and to the southeast of the project site

At this time, no specific information has been provided regarding proposed project lighting. It is reasonable to assume however that a significant number of lights will be included as part of the project. Because of the inherent activities and events associated with the project, the multi-story and open-air pavilion architecture, public safety and logistic requirements, security and equestrian safety needs, night lighting would contribute to the lighting seen in the project areas. Unshielded light sources, large buildings with bright interior and exterior lights, large windows and wall openings, illuminated staging areas, parking and pedestrian areas all would have the potential to result in an increase in the visible light level as seen from Highway 1 and the surroundings. In addition, daytime reflection and glare from large shiny roof materials and exterior surfaces also would have the potential to be noticeable from great distances.

Because of the project's size, structure configurations, intended uses, and health and safety requirements, the project has the potential to result in the introduction of a substantial amount of new nighttime light and daytime glare into the project areas. Therefore, implementation of the proposed project could result in potentially significant direct long-term impacts. Implementation of identified mitigation measures would minimize potential glare and lighting trespass impacts as seen from the surrounding areas. As a result, visual impacts based on new source of light or glare would be considered significant but mitigable.

Mitigation Measures

To ensure operational lighting and associated visual impacts are reduced to a level that is less than significant, the following mitigation measures are provided in accordance with the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001):

AES-1: Lighting and Glare – All exterior lighting shall be hooded. No unobstructed beam of light shall be directed toward sensitive uses. The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls). All lights must be shielded to avoid glare and spillover onto adjacent areas and onto public right of way areas.

AES-2 Contractors will locate stockpiling and staging areas out of view where feasible.

In addition to the amended Master Plan mitigation identified above, the following mitigation measures are recommended:

AES-3 Prior to the approval of construction documents by CSU, a comprehensive lighting plan shall be submitted for review and approval for that phase. The lighting plan shall be prepared using guidance and best practices endorsed by the International Dark Sky Association. The lighting plan shall address all aspects of the lighting, including but not limited to all buildings, infrastructure, parking lots and driveways, paths, recreation areas, safety, and signage. The lighting plan shall also consider effects on wildlife in the surrounding area. The lighting plan shall include the following at a minimum:

a. The point source of all exterior lighting shall be shielded from off-site views.

b. Light trespass from exterior lights shall be minimized by directing light downward and utilizing full cut-off fixtures or shields.

c. Lumination from exterior lights shall be the lowest level allowed by public safety standards.

d. Exterior lighting shall be designed to not focus illumination directly onto exterior walls.

e. Any signage visible from off-site shall not be internally luminated.

f. Light trespass from interior and arena lights associated with the pavilion structures shall be minimized by directing light downward and utilizing full cut-off fixtures, shields, or recessed fixtures.

AES-4 Prior to the approval of construction documents by CSU, building plans and elevations shall be submitted for review and approval consistent with the following conditions:

a. No highly reflective glazing or coatings shall be used on roofing materials.

b. No highly reflective exterior finishes such as chrome, bright stainless steel or glossy tile shall be used on the south and west facing sides of the development where visible from off-site locations.

c. No highly reflective glazing or coatings shall be used on west and south facing windows.

Conclusion

In general, existing development in the project vicinity is visually subordinate to the rural and agricultural character of the overall landscape. Although portions of the project would be visible from public viewpoints, these viewpoints would be limited to a short section of Highway 1, and to the Bishop Peak recreational areas. Where visible, the adjacent hills and mountain peaks rising up to the east would tend to dominate the views and to a great degree define the overall visual character. The project elements, when seen would be visually compatible with the working-agriculture setting of that part of campus. In addition, it is expected that to most casual observers, the proposed project buildings, paddocks and accessory structures would visually blend with the surroundings and would not be readily noticeable. The projects would be constructed in phases, which would allow a gradual transition from the current visual condition to project build-out. The project has the potential to result in the introduction of a substantial amount of new nighttime light and daytime glare into area, resulting in potentially significant direct long-term impacts; however, implementation of the proposed mitigation measures would reduce this impact to be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
II. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

Background

As noted in the Master Plan, the Phase 1, Phase 2, and Phase 3 project areas are identified as being suitable for agriculture facilities enhancement (or possible remote parking near Stenner Creek Road) based on an analysis of the microclimate, biological resources and habitat, visual impacts, site access, parking, circulation and traffic, infrastructure, land uses and other site characteristics. These areas are characterized by gentle slopes, relatively good vehicular access and availability of infrastructure, compatibility with surrounding uses, and the absence of class I soils and major biological and environmental issues. The Master Plan identifies the Phase 4 project area as not being suitable for new development or redevelopment due to environmental constraints. The Master Plan land use map designates all of the project areas as outdoor teaching and learning areas, including but not limited to a wide range of fields, animal units, and research centers used as living laboratories. The outdoor teaching and learning land use designation identifies land that regularly supports instruction, both within and outside the campus core. The Master Plan calls for outdoor teaching and learning facilities that are designed and managed to

promote an integrated teaching and learning environment where both buildings and spaces are central to the learning experience.

One project component, the Agricultural Pavilion Area associated with Phase 3, is included on the Master Plan campus development map. Proposed build-out of the Master Plan, including identified conceptual development within the Phase 3 area, would result in the conversion of approximately 100 acres of grazed land, which represented approximately 1.5 percent of the University's total agricultural land (Cal Poly 2001). The Final EIR for the Master Plan identified a less than significant (Class III) impact to agricultural resources as a result of the grazed land conversion, because prime farmland would be avoided.

There are three underlying soil units within the project area (refer to Table 2 below and Figure 6). The Phases 1, 2, and 3 project areas are developed with existing facilities that support the Equine Center, Environmental Horticultural Science Unit, and Beef Unit areas on campus; they do not support irrigated crops. The Phase 4 project area supports active agriculture in the form of row crops, in addition to existing facilities that support the Crops Unit. None of the project areas or adjacent parcels are under Williamson Act contract.

Table 2. Soil Units within Proposed Development Area

Soil Map Unit	Class (irrigated / non-irrigated)	Storie Index	Acreage within Proposed Development Area
158 – Los Osos loam, 5 to 9 % slopes	3e / 3e	Grade 2 – Good	49.61 acres
159 – Los Osos loam, 9 to 15 % slopes	4e / 4e	Grade 2 – Good	1.67 acres
197- Salinas silty clay loam, 0 to 2 % slopes	1 / 3c	Grade 1 – Excellent	8.47 acres
			57.31 acres

Source: NRCS 2017

Discussion of Checklist Answers

a. Based on review of the San Luis Obispo County Important Farmland map (Department of Conservation, 2014), the following farmland designations are applied to the project area: Prime Farmland (Phase 4 only: 5.54 acres); Farmland of Local Potential (Phase 1 only: 14.84 acres); Grazing Land (Phase 1 only: 0.31 acre); Urban and Built-Up Land (All Phases: 2.8 acres); and, Other Land (Phase 4 only: 0.14 acre) as shown in Figure 7. Definitions of these designations are presented below:

Prime Farmland. Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Local Potential. In San Luis Obispo County, Farmland of Local Potential is defined as lands having the potential for farmland, which have Prime or Statewide characteristics and are not cultivated.

Grazing. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

Figure 6. Soils Map

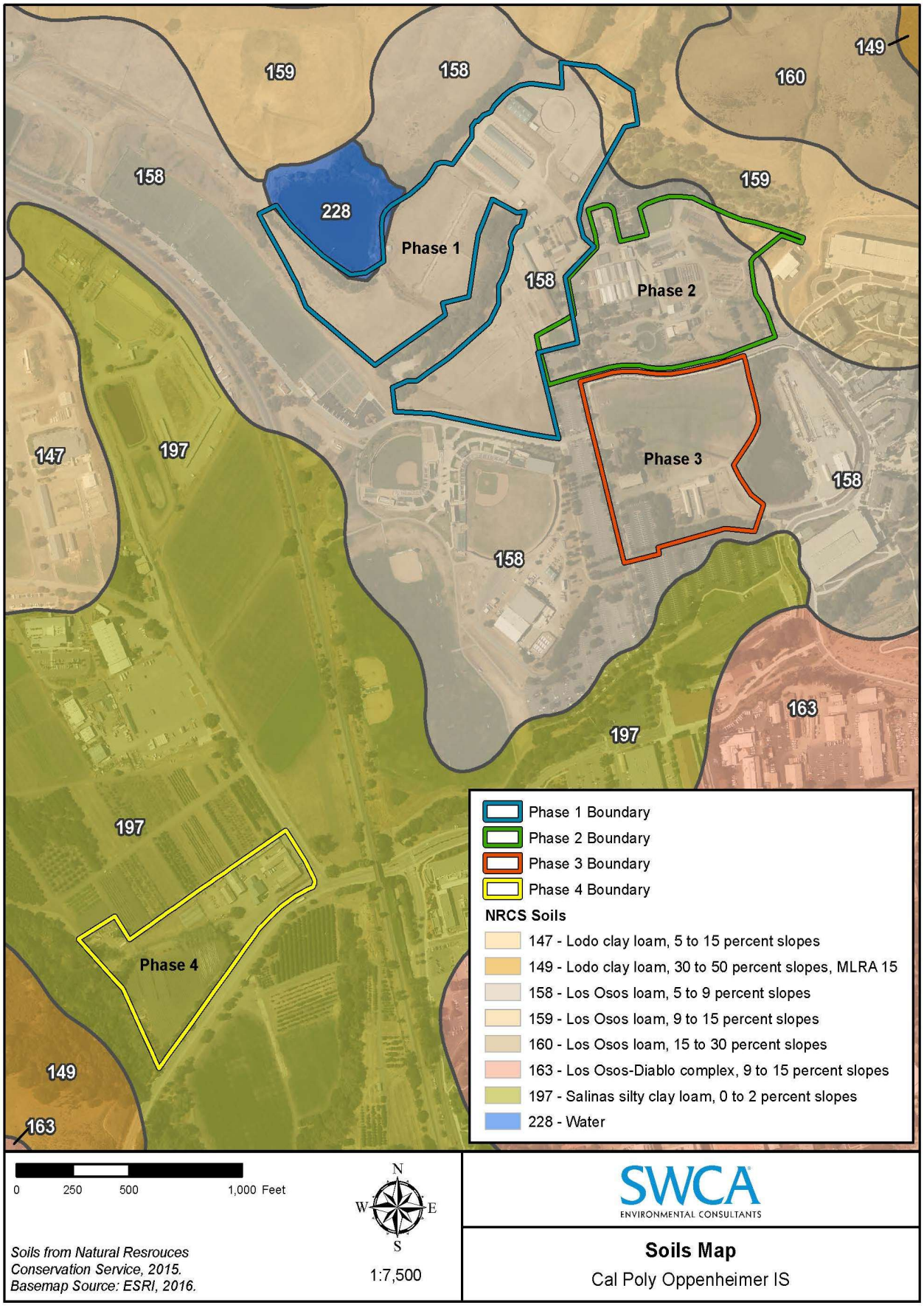
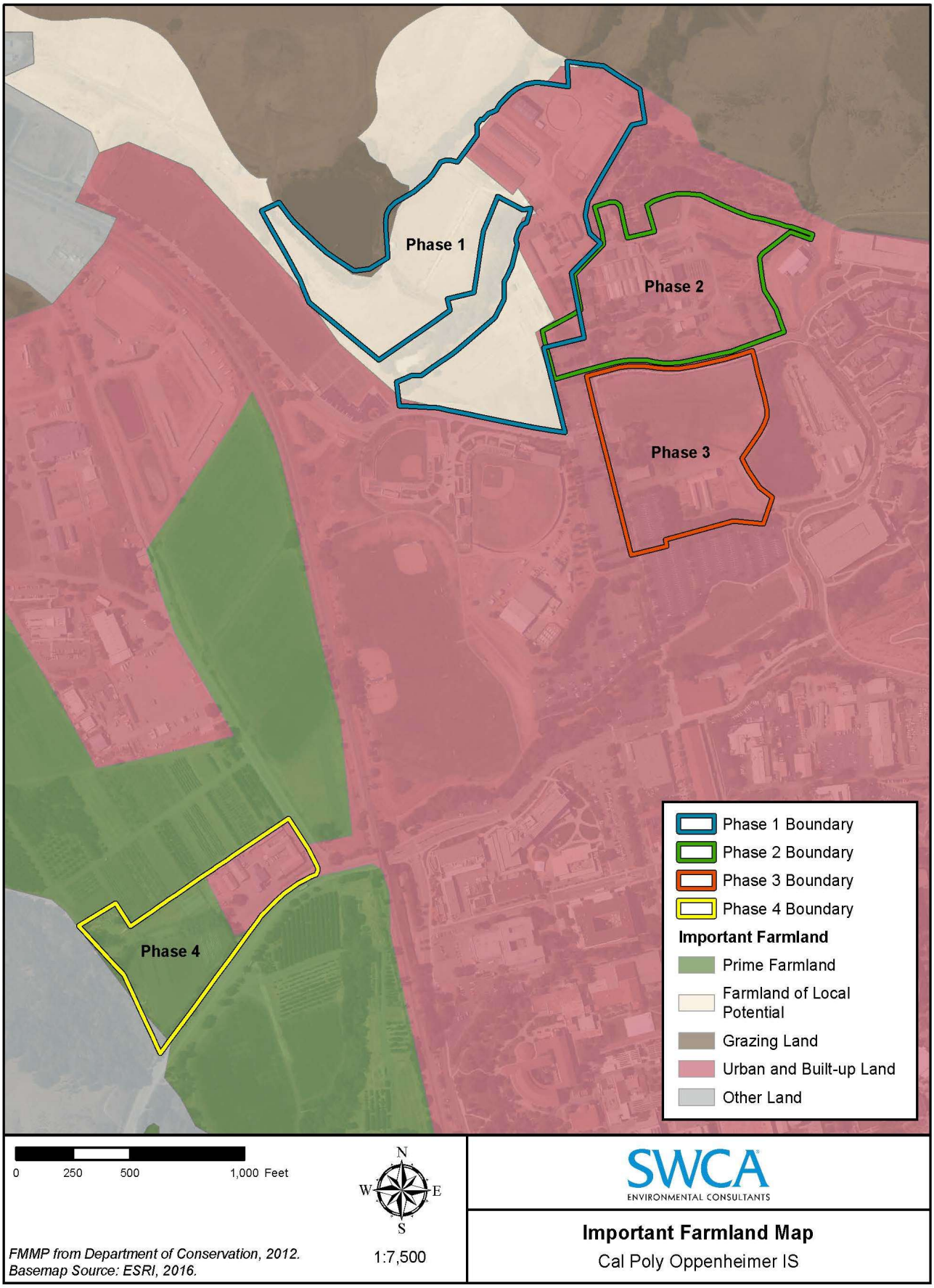


Figure 7. Important Farmland Map



Urban and Built-Up Land. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Other Land. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

As shown in Figure 7, The Phase 1 project area includes Farmland of Local Potential and Grazing Land; these areas currently support livestock facilities associated with the campus Equine Center. Proposed development in these areas would be consistent with existing uses and would continue to support livestock purposes. The Phase 4 project area includes 5.54 acres of Prime Farmland; this area currently supports active agriculture rotated to support varying row crops. Proposed development in this area would develop a new greenhouse facility on the existing agricultural area designated as Prime Farmland. Since the new greenhouse facility would support agricultural uses, support agricultural education and would replace the existing greenhouses and associated uses proposed to be demolished under Phase 2, the important farmland would not be converted to a nonagricultural use. Therefore, potential impacts would be less than significant.

b, e. The project site is not subject to a Williamson Act contract; therefore, no conflict with a Williamson Act contract would occur. The project area is located within the extended campus. Land uses identified for this area are limited to "Outdoor Teaching and Learning". The Outdoor Teaching and Learning element identifies the variety of "living laboratories" provided on the University campus (e.g., agricultural fields and units, ecological study areas, and design village), which are central to Cal Poly's mission and must remain integrated with the campus. The proposed project includes the modification and demolition of existing structures and construction of new structures within the campus Equine Unit, Environmental Horticultural Science Unit, Beef Unit, and Crops Unit. All of the new facilities would be consistent with the existing land uses in each of these areas and would support ongoing operations and would generally consistent with the land use plan for the campus. Therefore, the proposed project would not conflict with the proposed land use plan, and potential impacts would be less than significant.

c, d. The project site does not support forest land or timber production; therefore, no impact would occur.

Mitigation Measures

No additional mitigation required.

Conclusion

Implementation of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to a nonagricultural use, conflict with an agricultural land use designation or Williamson Act, impact forestland, or otherwise significantly impact agricultural resources. Therefore, impacts on agricultural resources would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to make the following determinations. **Would the project:**				
a. Conflict with or obstruct implementation of the applicable air quality plan?		X		
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d. Expose sensitive receptors to substantial pollutant concentrations?		X		
e. Create objectionable odors affecting a substantial number of people?			X	

Background

The information in this section is based on the Air Quality and Greenhouse Gas Impact Assessment prepared in support of the proposed project and included as Appendix B (Ambient Air Quality and Noise Consulting 2017).

Cal Poly is within the South Central Coast Air Basin, which encompasses all of San Luis Obispo, Santa Barbara, and Ventura Counties. Air quality within the County is regulated by the San Luis Obispo County Air Pollution Control District (SLOAPCD).

The SLOAPCD is responsible for monitoring the County's compliance with state and federal air quality standards. These standards represent allowable atmospheric contaminant concentrations at which the public health and welfare are protected, and include a factor of safety. In San Luis Obispo County, ozone and respirable particular matter (PM10) are the air pollutants of main concern, since exceedances of state health-based standards for those pollutants are experienced here in most years. For this reason, San Luis Obispo County has been designated as a non-attainment area for the state ozone and PM10 standards. The County is in attainment of all other standards.

Discussion of Checklist Answers

a. The applicable air quality plan is the SLOAPCD Clean Air Plan (2001). The plan projects air quality emissions and standard attainment goals based on growth rates in population and vehicle travel in San Luis Obispo County. The project would not conflict with or obstruct the Clean Air Plan because it does not include additional development growth, urban sprawl, or result in an increase in vehicle miles traveled due to the minimal operational trips necessary to maintain the facility. Impacts would be less than significant.

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report). The PM Report identifies various measures and strategies to reduce public exposure to PM emitted from a wide variety of sources,

including emissions from permitted stationary sources and fugitive sources, such as construction activities. Uncontrolled fugitive dust generated during construction may generate localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of fugitive dust associated with the proposed project would be considered potentially significant. Implementation of recommended mitigation would include measures to reduce construction-generated emissions of fugitive dust. With mitigation, overall emissions of fugitive dust would be reduced by approximately 55 percent. These measures would also help to ensure compliance with SLOAPCD's 20% opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and would minimize potential nuisance impacts to nearby receptors. Recommended mitigation also includes additional measures to reduce construction-generated emissions, including fugitive PM emissions associated with on-site demolition activities. Therefore, this impact is considered less than significant with mitigation.

b, c. Construction and operation of the proposed project would result in the emission of additional short- and long-term criteria air pollutants from mobile and/or stationary sources. "Criteria pollutants" under the Clean Air Act are ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter less than or equal to 10 microns in size (PM_{10}), particulate matter less than or equal to 2.5 microns in size ($PM_{2.5}$), and lead (Pb). An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards and/or the California Ambient Air Quality Standards. San Luis Obispo County is designated as attainment and/or unclassifiable of all federal standards with the exception of the 8-hour O_3 standard for the eastern portion of the County; the western portion of the County is designated as attainment for the federal 8-hour O_3 standard. The County is designated as nonattainment for the state 8-hour and 1-hour O_3 standards and the state PM_{10} standards, but is designated as attainment for all other state criteria pollutant standards.

Short-term Construction Emissions. Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Estimated daily and quarterly emissions associated with development of the proposed project phases are summarized in Table 3. As depicted, construction of the proposed project would generate a maximum of approximately 73.9 lbs/day of ROG+NO_X and approximately 3.1 lbs/day of exhaust PM_{10}. Quarterly construction-generated emissions would total approximately 2.2 tons of ROG+NO_X, 0.09 tons of diesel particulate matter (DPM), and 0.44 tons of Fugitive PM_{10}.

Construction-generated emissions associated with the proposed project would not exceed SLOAPCD's recommended daily or quarterly significance thresholds. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. Therefore, construction-generated particulate emissions would also be considered to have a potentially significant impact.

Table 3. Summary of Unmitigated Construction-Generated Emissions of Criteria Pollutants

Criteria	Project Emissions	SLOAPCD Significance Threshold	Exceed Significance Threshold?
Maximum Daily Emissions of ROG+NOX	73.9 lbs/day	137 lbs/day	No
Maximum Daily Emissions of DPM	3.1 lbs/day	7 lbs/day	No
Maximum Quarterly Emissions of ROG+NOX	2.2 tons/qtr	2.5 tons/qtr	No
Maximum Quarterly Emissions of DPM	0.09 tons/qtr	0.13 tons/qtr	No
Maximum Quarterly Emissions of Fugitive PM	0.44 tons/qtr	2.5 tons/qtr	No

[a] Summation of individual Reactive Organic Gases (ROG) and Nitrates of Oxygen (NO_X) outputs.
[b] Used exhaust PM10 and PM2.5 emissions as proxy for Diesel Particulate Matter (DPM) emissions.
[c] Emission thresholds taken from "CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review," SLOAPCD, April 2012. Emission thresholds listed are for Quarterly Tier 1.
Source: Ambient Air Quality and Noise Consulting 2017 (Appendix B).

With implementation of recommended mitigation, overall emissions of fugitive dust would be reduced by approximately 55 percent. Implementation of recommended mitigation would also help to minimize off-site emissions associated with the disposal of construction-generated waste. These measures would also help to ensure compliance with SLOAPCD's 20% opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and would minimize potential nuisance impacts to nearby receptors. With mitigation, this impact would be considered less than significant.

Long-term Operational Emissions. Unmitigated daily and annual operational emissions associated with the proposed project are summarized in Table 4 and Table 5, respectively. As depicted, maximum daily operational emissions at project buildout would total approximately 18.4 lbs/day ROG+NOx, 27.2 lbs/day CO, 8.2 lbs/day of fugitive PM_{10}, and 0.2 lbs/day of exhaust PM_{10}. Maximum annual emissions would total approximately 1.4 tons/year of ROG+NOx. Emissions of fugitive PM_{10} would be negligible (<0.05 tons/year).

Table 4. Comparison of Unmitigated Operational Emissions to APCD Daily Thresholds

Project Phase	Emissions (lb/day)				
	ROG + NO_X [a]	CO	Fugitive PM_{10}, Dust [c]	DPM	PM_{10} Total
Phase 1	0.4	0.1	0.0	0.0	0.0
Phase 2	2.3	0.4	0.0	0.0	0.0
Phase 3	13.8	26.4	8.2	0.1	8.3
Phase 4	2.0	0.4	0.0	0.0	0.0
Project Buildout	18.4	27.2	8.2	0.2	8.4
SLOAPCD Significance Thresholds	25	--	25	--	--
Daily Operational Emissions Exceed Threshold?	No	No	No	No	--

Source: Ambient Air Quality and Noise Consulting 2017 (Appendix B).

Table 5. Comparison of Unmitigated Operational Emissions to APCD Annual Thresholds

Project Phase	Emissions (~~lb/day~~tons/year)				
	ROG + NO_X [a]	CO	Fugitive PM_{10}, Dust [c]	DPM	PM_{10} Total
Phase 1	0.1	0.0	0.0	0.0	0.0
Phase 2	0.4	0.1	0.0	0.0	0.0
Phase 3	0.5	0.1	0.0	0.0	0.0
Phase 4	0.4	0.1	0.0	0.0	0.0
Project Buildout	1.4	0.3	0.0	0.0	0.0
SLOAPCD Significance Thresholds	25	--	25	--	--
Daily Operational Emissions Exceed Threshold?	No	--	No	--	--

Source: Ambient Air Quality and Noise Consulting 2017 (Appendix B).

Long-term operation of the proposed project would not generate emissions that would exceed SLOAPCD's recommended significance thresholds. This impact would be considered less than significant.

d. The proposed project areas are located on the Cal Poly campus. Nearby sensitive receptors consist predominantly of on-campus student housing facilities. The nearest student housing facilities are located approximately 235 feet to the east of the Phase 2 project area, adjacent to and east of Village Drive.

Localized CO Concentrations. Localized concentrations of CO are of primary concern in areas located near congested roadway intersections. The proposed facilities would not be anticipated to result in a substantial increase in vehicle traffic. In addition, no signalized intersections that would be primarily affected by the project were identified on the Cal Poly campus. The nearest signalized intersection likely affected by the proposed project is the intersection of Highland Drive and Santa Rosa Street. Based on traffic analysis recently prepared for the Student Housing South project, this intersection is projected to operate at LOS D, or better, under near-term and future operational conditions (Cal Poly 2013). Therefore, the proposed project would not be anticipated to result in or contribute to unacceptable levels of service (i.e., LOS E or F) at primarily affected signalized intersections. Furthermore, as previously noted, the proposed project would not result in emissions of CO in excess of the SLOAPCD's significance threshold of 550 lbs/day. This impact is considered less than significant.

Naturally Occurring Asbestos. Naturally Occurring Asbestos (NOA) has been identified as a toxic air contaminant by the ARB. In accordance with ARB Air Toxics Control Measure (ATCM), prior to any grading activities a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request form, along with a copy of the geologic report, must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.

Based on a review of the SLOAPCD's map depicting potential areas of NOA, the project site is located in an area that has been identified as having a potential for NOA (Refer to Appendix B). This impact is considered potentially significant.

Asbestos-Containing Materials. Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos can be found in various building products, including (but not limited to) utility pipes/pipelines (transite pipes or insulation on pipes). Asbestos containing materials could be encountered during demolition, particularly older structures constructed prior to 1970. If a project

involves the disturbance or potential disturbance of ACM, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - Asbestos NESHAP). These requirements include but are not limited to: 1) notification, within at least 10 business days of activities commencing, to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM.

The proposed project includes the demolition of approximately 78,434 square feet of existing structures. As a result, demolition activities could result in the potential disturbance of ACM. This impact is considered potentially significant.

Lead-Coated Materials. Demolition of structures coated with lead based paint can have potential negative air quality impacts and may adversely affect the health of nearby individuals. Improper demolition can result in the release of lead containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. Therefore, proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. Furthermore, depending on removal method, a SLOAPCD permit may be required. This impact is considered potentially significant.

Localized PM Concentrations. Implementation of the proposed project would result in the generation of fugitive PM emitted during construction. Fugitive PM emissions would be primarily associated with earth-moving, demolition, and material handling activities, as well as, vehicle travel on unpaved and paved surfaces. Onsite off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM (DPM). If uncontrolled, localized concentrations of PM could exceed air quality standards and may also result in increased nuisance impacts to nearby land uses and receptors. This impact is considered potentially significant.

Recommended mitigation includes measures for the control of fugitive dust emitted during project construction, including emissions generated during the demolition of existing structures. Mitigation has also been included for the control of potentially hazardous emissions during site preparation and demolition and to ensure compliance with applicable regulatory requirements. Mitigation includes provisions for reducing emissions of DPM from onsite mobile sources. With implementation of recommended mitigation, this impact would be considered less than significant.

e. The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source. The proposed equestrian facilities would require the temporary storage of animal wastes. However, waste materials would not be stored for extended periods and would be promptly removed in accordance with current waste management practices. In addition, large equestrian events are only anticipated to occur approximately 30-days per year. For these reasons, short-term construction activities and long-term operational activities would not expose a substantial number of people to frequent odorous emissions. This impact would be considered less than significant.

Mitigation Measures

To ensure emissions generated during construction activities are reduced to a level that is less than significant, the following mitigation is provided in accordance with the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001):

AQ-1 Dust Control[1]

A) Employ measures to avoid the creation of dust and air pollution.

B) Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently.

C) All unpaved roads shall be overlain with decomposed granite, class II or III road base material, or a similar material to prevent dust generation from unpaved roads. The applied road base material shall be maintained as necessary.

D) Vehicle speeds on all unpaved roads shall be limited to 15 mph or less during construction and operation.

~~C)~~E) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.

~~D)~~F) Store all volatile liquids, including fuels or solvents in closed containers.

~~E)~~G) No open burning of debris, lumber or other scrap will be permitted.

~~F)~~H) Properly maintain equipment to reduce gaseous pollutant emissions.

~~G)~~I) Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible.

~~H)~~J) Cover stockpiles of soil, sand and other loose materials.

~~I)~~K) Cover trucks hauling soil, debris, sand or other loose materials.

~~J)~~L) Sweep project area streets at least once daily.

~~K)~~M) Appoint a dust control monitor to oversee and implement all measures listed in this Article.

~~L)~~N) The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent construction dust and debris from entering the adjacent areas.

~~M)~~O) When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas.

~~N)~~P) Water down the project site, access routes, and lay down areas whenever generate dust becomes a nuisance.

~~O)~~Q) The campus reserves the right to request watering of the site whenever dust complaints are received.

~~P)~~R) It shall be the university's sole discretion as to what constitutes a nuisance.

In addition to the measure listed above, the following measures shall be implemented to reduce fugitive dust emissions generated during construction activities in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001):

a. During construction, the amount of disturbed area shall be minimized.

b. On-site vehicle speeds should be reduced to 15 miles per hour or less.

[1] Dust control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOAPCD recommendations as provided in the SLOAPCD *CEQA Air Quality Handbook* (SLOAPCD 2012).

c. Exposed ground areas that are left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established.

d. After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized.

e. All roadways associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.

f. Rock pads and/or rumble strips (or similar) shall be installed where vehicles enter and exit unpaved areas onto streets, or trucks and equipment shall be washed off before leaving the site.

g. All PM_{10} mitigation measures shall be shown on grading and building plans.

h. The contractor or builder shall consider the use of a SLOAPCD-approved dust suppressant where feasible to reduce the amount of water used for dust control.

i. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the SLOAPCD's limit of 20 percent opacity for greater than 3 minutes in any 60 minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person(s) shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.

The following mitigation measure is provided in accordance with the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001) to reduce NOx, ROG and diesel particulate matter emissions generated from on-site construction equipment:

AQ-2: Equipment Emission Control[2]

a. On-road diesel vehicles shall comply with Section 2485 of Title 13 or the California Code of Regulations. This regulation limits idling from diesel-fueled commercial vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

   - Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and

   - Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

b. Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation.

~~j.~~c. The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturer's specifications.

~~k.~~d. The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel.

[2] Equipment emission control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOAPCD recommendations as provided in the SLOAPCD *CEQA Air Quality Handbook* (SLOAPCD 2012).

l.e. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation.

m.f. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.

n.g. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance.

o.h. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.

p.i. Electrify equipment when feasible.

q.j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible.

r.k. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

l. No on or off-road diesel equipment shall be allowed to idle within 1,000 feet of sensitive receptors. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the idling restrictions limit. To the extent feasible, no equipment staging areas shall be located within 1,000 feet of any sensitive receptors.

s.m. Proposed truck routes shall be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.

With incorporation of Mitigation Measures AQ-1 and AQ-2, which reflect mitigation as identified in the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001) and SLOAPCD *CEQA Air Quality Handbook* (SLOAPCD 2012), impacts are anticipated to be less than significant during construction.

In addition to the amended Master Plan mitigation identified above, the following mitigation measures are recommended to reduce exposure of sensitive receptors to substantial pollutant concentrations. These measures shall be shown on grading and building plans:

AQ-3 In the event materials potentially containing asbestos are to be disturbed or removed from the project site, the Construction Contractor shall comply with the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM.

AQ-4. The presence or absence of naturally-occurring asbestos must be determined prior to start of soil disturbing activities. If Naturally Occurring Asbestos (NOA) is not present on-site, an exemption request will be filed with the SLOAPCD. If NOA is present on-site, the project will comply with all requirements outlined in the Asbestos Airborne Toxic Control Measures. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the SLOAPCD.

AQ-5 Prior to ground disturbance and construction, the Construction Contractor shall ensure a geologic evaluation is conducted to determine if the area disturbed is exempt from the Air Resources Board Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105). If the site is not exempt from the ATCM requirements, the Construction Contractor shall comply with all requirements outlined in the Asbestos ATCM, which may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the SLOAPCD.

AQ-6 Prior to ground disturbance and construction, the Construction Contractor shall obtain all required permits for the use of portable equipment, 50 horsepower or greater, from the SLOAPCD.

AQ-~~5~~7 Prior to operation of the project, Cal Poly shall obtain all required operational permits from the SLOAPCD.

AQ-~~6~~8 If during demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials.

Depending on the removal method, an APCD permit may be required. ~~The disposal of demolition debris shall comply with any such requirements.~~ Contact the SLOAPCD ~~Enforcement~~ Engineering and Compliance Division at (805) 781-5912 for more information. For additional information regarding lead abatement, contact the San Luis Obispo County Environmental Health Department at (805) 781-5544 or Cal-OSHA at (818) 901-5403. Additional information can also be found online at www.epa.gov/lead. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition.

AQ-~~7~~9 On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

a. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,

b. Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

AQ-10~~8~~ The following measures shall be implemented to reduce construction-generated emissions from construction equipment:

a. Maintain all construction equipment in proper tune in accordance with manufacturer's specifications;

b. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

c. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy duty diesel engines, and comply with the State Off-Road Regulation;

d. Idling of all on- and off-road diesel-fueled vehicles shall not be permitted when not in use. Signs shall be posted in the designated queuing areas and or job site to remind drivers and operators of the no idling limitation.

e. Electrify equipment when possible;

f. Substitute gasoline-powered in place of diesel-powered equipment, when available; and,

g. Use alternatively fueled construction equipment on-site when available, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

AQ-11 The following measures shall be implemented if special events will require access via an unpaved road:

On the day(s) of a special event:

a. Any unpaved site (access road(s)/driveway(s)) that will be used for the special event shall be maintained with a SLOAPCD-approved dust suppressant (see Technical Appendix 4.3 of the SLOAPCD's CEQA Handbook) such that fugitive dust emissions do not exceed the SLOAPCD 20% opacity limit for greater than 3 minutes in any 60-minute period (APCD Rule 401) or prompt nuisance violations (APCD Rule 402).

b. Designated parking locations shall be:

1. Paved when possible;

2. Planted and maintained with fast germinating non-invasive grass or low cut dense vegetation; or,

~~1.~~3. Maintained with a dust suppressant such that fugitive dust emissions to not exceed the SLOAPCD 20% opacity limit or create nuisance.

AQ-12 If the project's access involves a City- or County-owned and maintained road, the applicant shall work with the applicable Public Works Department to ensure that the mitigation follows the agency's road standards for that section of road. The applicant may propose alternative measures of equal effectiveness by contacting the SLOAPCD's Planning, Monitoring & Outreach Division at (805) 781-4667.

Conclusion

The project is consistent with the Clean Air Plan. Modeled emissions from the project are considered less than significant. The project would not pose particular risk to sensitive receptors, nor would it be a source of objectionable odors. Construction activities have the potential to result in the generation of nuisance dust and particulate matter; however, implementation of the proposed mitigation measures would reduce this impact to a less-than-significant level.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
IV. BIOLOGICAL RESOURCES **Would the project:**				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

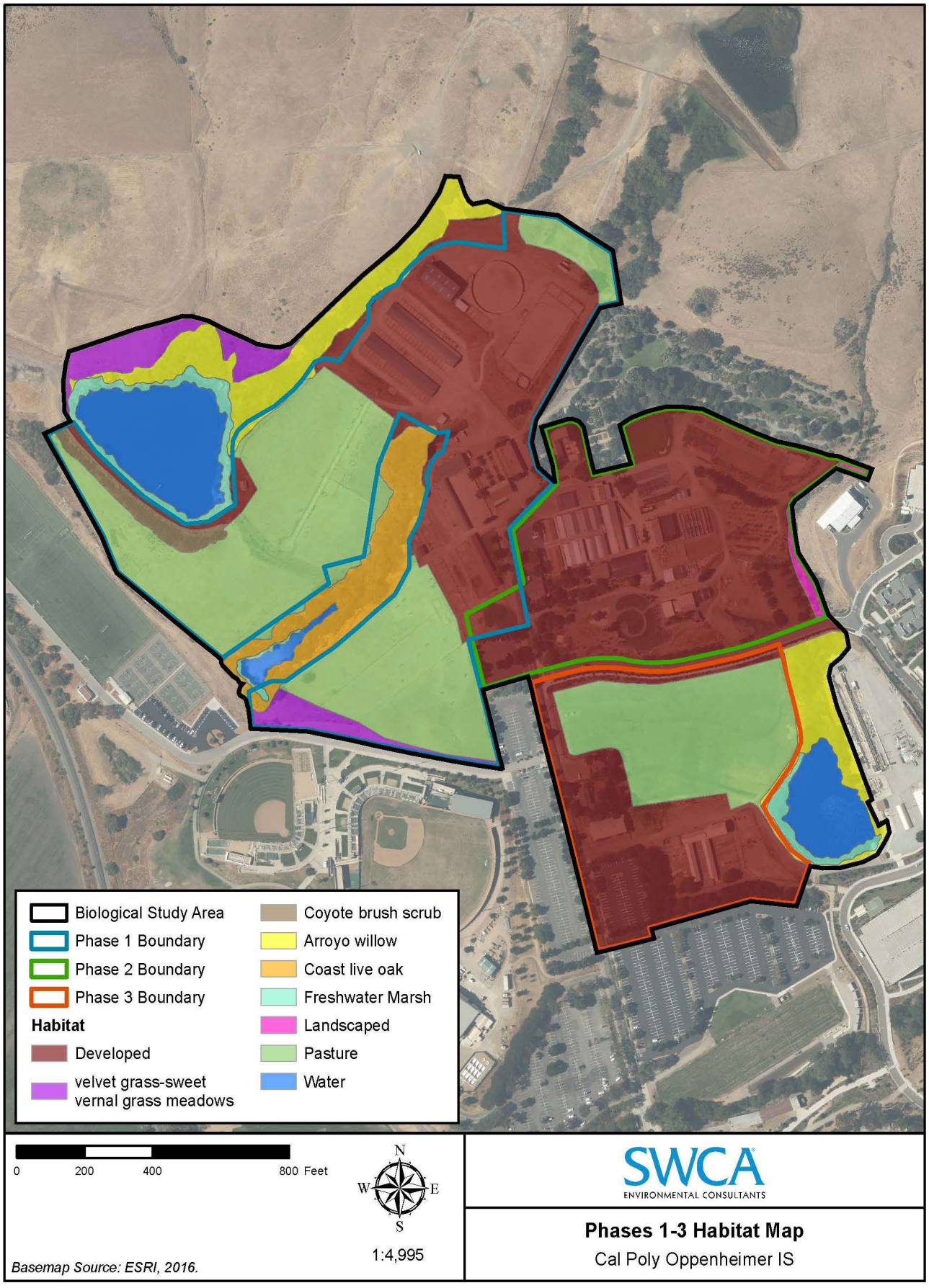
Background

Two biological study areas (BSAs) are included in this evaluation; the Oppenheimer Site (Phases 1, 2, and 3 project areas) and the Crops Unit (Phase 4 project area). Both BSAs currently support educational facilities and largely consist of developed or otherwise disturbed land. Each BSA is described in detail below.

Oppenheimer BSA. The Oppenheimer BSA includes 62.86 acres located at the intersection of Via Carta and Village Drive. The area proposed for development currently supports the Environmental Horticultural Sciences (EHS) facilities, the Equine Center facilities, and equestrian paddocks and grazing areas. The EHS facilities include active greenhouses, a plant shop, outdoor gardens, and a variety of EHS outbuildings. The Equine Center includes a breeding lab, foaling stall, stallion barn, student horse barn, a variety of arenas, hay barns, and equipment storage barns. The equestrian paddocks and grazing areas include irrigated pasture land and dry land pastures. The Oppenheimer BSA includes portions of the Drumm Reservoir drainage in the east, Smith Reservoir and its drainage in the middle of the study area, and Shepard Reservoir and its drainage to the west. These reservoirs are federal waters subject to United States Army Corps of Engineers (USACE) jurisdiction; however, the reservoir drainages lack ordinary high water marks (OHWM). Due to the lack of OHWM, the reservoir drainages are not within USACE jurisdiction. All three reservoirs and their associated drainages support bed and bank features; therefore, they are state waters subject to California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB) jurisdictions (SWCA 2015). The state jurisdictional boundary is delineated by the extent of riparian vegetation and top-of-bank features; whereas, the jurisdictional boundaries of the federal waters are delineated by the outer extent of hydrophytic vegetation, hydric soils, and wetland hydrology. Descriptions of the vegetated habitats present within the Oppenheimer BSA are provided below. Habitats and jurisdictional boundaries are mapped on Figure 8.

Drumm Reservoir supports open water habitat, freshwater marsh, and Arroyo willow thicket (*Salix lasiolepis* Shrubland Alliance). The Drumm Reservoir drainage supports non-native grasses with few planted landscape and native tree species. The non-native grasses are weed-whacked to reduce competition for the planted trees. Sparse occurrences of coyote brush (*Baccharis pilularis*) are also present in the drainage.

Figure 8. Oppenheimer Biological Study Area



Smith Reservoir supports bare ground and freshwater marsh on the fringes of the reservoir. The Smith Reservoir drainage supports 2.6 acres of coast live oak woodland (*Quercus agrifolia* Woodland Alliance). Coast live oak woodlands include coast live oak (*Quercus agrifolia*) as the dominant evergreen tree, often reaching 30 to 75 feet in height and establishing dense canopies. The coast live oak woodland in the Smith Reservoir drainage is a mixed stand with arroyo willow (*Salix lasiolepis*) and California bay (*Umbellaria californica*). The understory is disturbed and dominated by non-native annual grasses with sparse occurrences of California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), poison oak (*Toxicodendron diversilobum*), and toyon.

The Shepard Reservoir drainage and a portion of Drumm reservoir supports approximately four acres of Arroyo willow thicket (*Salix lasiolepis* Shrubland Alliance), which consists of scrubby streamside thickets that are dominated by arroyo willow (*Salix lasiolepis*). The thickets vary in density from partially open to impenetrable. The understory supports California blackberry and stinging nettle (*Urtica dioica*). The southwestern bank of Shepard Reservoir includes a stand of coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) that is located outside of the pasture fence. This stand is entirely comprised of coyote brush, which is a native pioneer species that commonly colonizes disturbed areas. A small sliver of common velvet grass-sweet vernal grass meadows (*Holcus lanatus-Anthoxanthum odoratum* Herbaceous Semi-Natural Alliance) occurs on the northern flank of Shepard Reservoir. This area is fenced off from the adjacent grazing areas and supports velvet grass (*Holcus lanatus*).

The various pasture lands support a mix of bare dirt and non-native grasses. These areas are subject to near constant grazing and trampling by horses. The vegetative composition in the pastures vary overtime depending on what species the Equine Center managers have seeded the area with, the amount of irrigation, and the level of use at the time. Therefore, the pasture areas do not constitute a naturalized or native grassland community. Plant species observed in the pastures during the reconnaissance survey included but were not limited to softchess brome (*Bromus hordeaceous*), purple false brome (*Brachypodium distachyon*), fillary (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), and tree tabacco (*Nicotiana glauca*).

Crops Unit BSA. The Crops Unit BSA includes approximately 8.47 acres located at the intersection of Highland Drive and Mt. Bishop Road. The Stenner Creek riparian area is adjacent to the western border; Highland Drive is to the south of the study area; agricultural facilities are located immediately east of the study area; and agricultural fields (orchards) are located along the northern boundary. The Crops Unit BSA is comprised of landscaped and developed areas, ruderal vegetation, and active agriculture. Descriptions of the vegetated habitats present within the Crops Unit BSA are provided below. Habitats and jurisdictional boundaries are mapped on Figure 9.

The active agricultural area is rotated to support varying row crops and does not constitute a vegetative community. The landscaped and developed areas includes green houses and other agricultural support facilities. A line of planted coast live oak and other tree species are located along the boundary of Highland Drive and the active agricultural area. The remaining portions of the study area support ruderal vegetation and senescent windrow trees. Ruderal vegetation is commonly found in abandoned agricultural fields, along roadsides, near developments, and in other areas experiencing severe ground surface disturbance. Within the Crops Unit BSA, this vegetation type includes poison hemlock (*Conium maculatum*), ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), sweet fennel (*Foeniculum vulgar*), wild oats (*Avena fatua*), Italian thistle (*Carduus pycnocephalus*), perennial mustard (*Hirschfeldia incana*), horseweed (*Erigeron canadensis*), and bristly ox-tongue (*Picris echioides*) in the understory. The overstory is comprised of old eucalyptus trees that were likely planted as windrows.

Discussion of Checklist Answers

a. Based on a nine-quadrangle review of the California Natural Diversity Database (CNDDB), a total of 65 special-status plant species, 38 special-status animal species, and nine natural communities of concern were evaluated for potential presence in the two study areas. Appendix C includes tables that evaluate each species and their potential to occur within the project areas.

Plant Species, Construction-Related Impacts. Based on the habitat conditions of the project areas and the habitat requirements of the reviewed special-status plant species, it was determined that the project study areas provide marginal conditions for the following plant species and vegetative community: marsh sandwort (*Arenaria paludicola*), San Luis Obispo sedge (*Carex obispoensis*), Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*), splitting yarn lichen (*Sulcaria isidiifera*), and coastal and valley freshwater marsh.

Figure 9. Crops Unit Biological Study Area

Marsh sandwort, San Luis Obispo sedge, and Coulter's goldfields are typically found in mesic sites such as marshes and swamps, riparian areas, reservoirs, and vernal pools. As such, the portions of the project study areas that have potential to support these species include the Smith Reservoir, the Shepard Reservoir, Drumm Reservoir, and the Stenner Creek riparian corridor. Splitting yarn lichen occurs in old growth oak woodlands; therefore, the portions of the project study areas that have potential to support this species are the Smith Reservoir drainage and the Stenner Creek riparian corridor. Coastal and valley freshwater marsh occurs on the fringes of Drumm, Smith and Shepard reservoirs. As proposed, the project would avoid grading and other land-disturbing activities in these wetland areas; therefore, impacts to these species and vegetative community are not expected.

Animal Species, Construction-Related Impacts. Cooper's hawk was the only special status wildlife species observed during the reconnaissance survey of the study areas. The following twenty-four special-status wildlife species have the greatest potential to occur within, or proximate to the project sites, and are discussed in detail below.

- Monarch butterfly
  Danaus plexippus
- South-central California coast steelhead Distinct Population Segment (DPS)
  Oncorhynchus mykiss irideus
- foothill yellow-legged frog
  Rana boylii
- California red-legged frog
  Rana draytonii
- Coast range newt
  Taricha torosa
- silvery legless lizard
  Anniella pulchra
- black legless lizard
  Anniella pulchra nigra
- western pond turtle
  Emys marmorata
- Cooper's hawk
  Accipiter cooperii
- tricolored blackbird
  Agelaius tricolor
- grasshopper sparrow
  Ammodramus savannarum
- great blue heron
  Ardea herodias
- ferruginous hawk
  Buteo regalis
- western yellow-billed cuckoo
  Coccyzus americanus occidentalis
- white-tailed kite
  Elanus leucurus
- California horned lark
  Eremophila alpestris actia
- Merlin
  Falco columbarius
- loggerhead shrike
  Lanius ludovicianua
- purple martin
  Progne subis
- pallid bat
  Antrozous pallidus
- Townsends big-eared bat
  Corynorhinus townsendii
- western mastiff bat
  Eumops perotis
- big free-tailed bat
  Nyctinomops macrotis
- Class Aves
  Other migratory bird species (nesting)

Monarch butterfly. The monarch butterfly is an easily recognized orange and black butterfly that aggregates in large groups, participating in lengthy migrations. Monarchs from west of the Rocky Mountains spend the winter along the California coast. Overwintering sites occur in dense, wind-protected tree groves [eucalyptus (*Eucalyptus* spp.), Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*)] near the coast from northern Mendocino to Baja California (CNDDB 2016). Groves shelter the butterflies from freezing temperatures and gusty winds. Monarch butterflies are typically attracted to groves along coastal areas of California that feature high moisture content and filtered sunlight. Milkweed (*Asclepias* spp.) serves as the host plant for monarch butterfly larvae.

The Stenner Creek riparian corridor provides suitable overwintering habitat for monarch butterflies. SWCA biologist, Travis Belt has observed monarch butterflies overwintering in the Stenner Creek riparian corridor located approximately 0.70 mile upstream of the Plant Sciences Complex Study Area (T. Belt, personal observation 2005). The dense canopy of the riparian trees in Stenner Creek provides the wind shelter and filtered light that is indicative of suitable overwinter habitat for this species.

Removal of trees from the Stenner Creek riparian corridor could indirectly affect the overwintering habitat by altering the microclimate of the tree canopy or directly affect overwintering butterflies if they were present during tree removal. Phase IV of the proposed project does not include removing trees from the riparian corridor of Stenner Creek; therefore, adverse effects to Monarch butterflies are not expected.

South-central California coast steelhead DPS. Steelhead are the anadromous form of rainbow trout. Steelhead historically ranged from Alaska southward to the California-Mexico border, though current data suggest that the Ventura River is presently the southernmost drainage supporting substantial steelhead runs.

All populations of steelhead occurring within the south-central California coast DPS region were listed as federally threatened in 1997 (United States Fish and Wildlife Service [USFWS] 1998), and are also considered a California Species of Special Concern (SSC) species by CDFW. This region is defined as the geographic region north of the Santa Maria River, northward to and including the Pajaro River and its tributaries in Santa Cruz County. Optimal habitat for steelhead throughout its entire range on the Pacific Coast can generally be characterized by clear, cool water with abundant instream cover (i.e., submerged branches, rocks, logs), well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio (Raleigh et al., 1984). Steelhead are occasionally found in reaches of streams containing habitat that would be considered less than optimal.

Stenner Creek is a known steelhead stream and is included as critical habitat in the San Luis Obispo Creek Hydrologic Sub-area 331024 (National Oceanic and Atmospheric Administration National Marine Fisheries Service [NOAA Fisheries] 2005). If the proposed project included elements that could reduce stormwater or ground water inputs to Stenner Creek, the potential to adversely modify steelhead critical habitat could exist. If included in the project, a new well could remove ground water from the creek system; additionally; increased quantities of impermeable surfaces that direct stormwater away from the creek system could reduce surface flows in Stenner Creek, thus modifying steelhead critical habitat in the creek. An avoidance measure is recommended to avoid hydrologic modifications to Stenner Creek.

Foothill yellow-legged frog and Coast Range Newt Foothill yellow-legged frog frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. It is sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools (California Herps 2016). CNNDB documents historic occurrences of this species approximately six miles southeast of San Luis Obispo.

Coast Range newt ranges discontinuously along the coast of California from Mendocino County to San Diego County. Optimum habitats consist of valley-foothill hardwood forest in association with rivers, creeks, ponds, and lakes with rocky substrates. This species is seasonally abundant within the upper watersheds of several San Luis Obispo County creeks, including San Luis Obispo Creek near Cuesta Grade, Morro Creek near Cerro Alto campground, and the uppermost reaches of Toro Creek (J. Tupen, Morro Group Biologist, pers. obs.).

Stenner Creek provides the necessary habitat conditions for these species. However, neither of these species would be expected to occur outside of the Stenner Creek riparian corridor. The proposed Plant Sciences Complex project (Phase IV) does not include alterations of Stenner Creek or its riparian corridor. Therefore, the proposed project is not anticipated to impact foothill yellow-legged frog or coast range newt.

California red-legged frog. The California red-legged frog was formally listed by the USFWS as federally threatened in 1996, and is considered a Species of Special Concern (SSC) by CDFW. The two project study areas are located within Critical Habitat for this species. California red-legged frog prefers aquatic

habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails. During periods of wet weather, starting with the first rains of fall, some individuals may make overland excursions through upland habitats. During dry periods, the California red-legged frog is rarely encountered far from water (USFWS 2002). California red-legged frog may use upland shelter habitat under logs, in small mammal burrows, or soil cracks provided ample moisture is available in the shelter area.

Shepard Reservoir contains water most of the year. Therefore, Shepard Reservoir provides suitable aquatic habitat and its drainage provides suitable upland shelter habitat for California red-legged frog. Smith Reservoir has been dry for the last several years and is typically dry most of the year during years of normal rainfall. Therefore, Smith Reservoir provides suitable aquatic habitat only when water is present. Neither of these reservoirs are known to support breeding California red-legged frogs. However, the presence of this species in the reservoirs and the reservoir drainages cannot be ruled out. The upland pastures surrounding the reservoirs and drainages is heavily managed and does not support suitable upland shelter refugia such as dense vegetation, moist soils, or debris that maintains moist conditions that would be necessary for amphibians to utilize for shelter. Therefore, California red-legged frog and other amphibians are not expected to utilize the upland pastures for shelter during the dry season. If California red-legged frogs were present in the area during the dry season, they would remain in the wetted portions of the reservoir(s). The proposed project will not affect the reservoirs. Therefore direct impacts to breeding California red-legged frog or their aquatic habitat are not expected. The proposed project would require grading and construction activities in the upland pastures adjacent to the reservoirs. If California red-legged frog were breeding in the reservoir(s), the individuals could disperse through the construction areas during the wet season. If this dispersal were to occur when construction was underway, the individual(s) could be crushed or otherwise adversely affected by the construction equipment. The potential for this impact can be avoided by conducting construction activities in the upland pastures adjacent to the reservoirs during the dry season. An avoidance measure is recommended to avoid potential impacts to dispersing California red-legged frog.

Western Pond turtle. The western pond turtle is a SSC species that lives where water persists year-round in ponds along foothill streams or in broad washes near the coast. The western pond turtle is mostly aquatic, leaving its aquatic site to reproduce, aestivate, and over-winter in nearby upland areas. Shepard Reservoir contains water most of the year. Therefore, Shepard Reservoir provides suitable aquatic habitat and its drainage provides suitable upland shelter habitat for western pond turtle. Smith Reservoir and Stenner Creek are often dry; therefore, only support western pond turtle aquatic habitat when water is present. The Smith Reservoir drainage and Stenner Creek riparian corridor provide suitable upland habitat for this species. The proposed project will not impact the reservoirs, the reservoir drainages, the bed of Stenner creek, or the Stenner Creek riparian area; therefore, impacts to western pond turtle are not expected.

Silvery and Black Legless Lizards. Silvery and black legless lizards are considered a SSC species by CDFW. They are elusive, fossorial (sub-surface), coastally distributed lizards ranging from the San Francisco Bay area southward into northern Mexico (Zeiner et al., 1988). Suitable habitat includes loose soils of coastal dune, valley foothill woodland, chaparral, and coastal scrub areas, where the species forages at the bases of vegetation and under leaf litter. The reservoir drainages, the Stenner Creek riparian corridor, and a small patch of coastal scrub located adjacent to Shepard Reservoir provide marginal habitat for these species. The reservoir drainages and Stenner Creek riparian area will not be affected by the proposed project. However, the small patch of coastal scrub adjacent to Shepard Reservoir will be filled in with excavated native soils. Direct impacts to legless lizards could include injury or mortality from construction equipment, construction debris, and worker foot traffic. Minimization measures are provided to reduce the potential for this impact to occur. Therefore, potential impacts would be mitigated to less than significant.

Tricolored blackbird. The tricolored blackbird is similar to the more common red-winged blackbird, except for a prominent white stripe under the red wing patch, and more pointed wings and bill. It is common locally throughout the Central Valley and along the coast south of Sonoma County. This species breeds near fresh water, preferably in emergent wetlands, and forages in grasslands and croplands. Tricolored

blackbirds usually nest in dense cattails (*Typha* spp.) or tules (*Scirpus* spp.); also nests in thickets of willow (*Salix* spp.), blackberry (*Rubus ursinus*), wild rose (*Rosa californica*), and tall forbs. Mud or plant material nests are usually located a few feet over, or near, fresh water, or may be hidden on the ground among low vegetation. The typical tricolored blackbird breeding season is mid-April into late July.

The edges of Drumm, Shepard, and Smith reservoirs provide suitable nesting habitat for tricolored blackbird and the various pastures in the Oppenheimer study areas provide suitable forging habitat. The emergent wetland habitat in the reservoir will not be affected by the project; therefore, impacts to nesting tricolored blackbird are not expected. The pastures will be subject to grading and other construction activities, which will not result in a direct impact to tricolored blackbird. The grading and construction activities will result in a loss of available foraging habitat. Since the areas surrounding the project include thousands of acres of grassland habitats, the small loss of foraging habitat in the project area is not significant.

Cooper's Hawk. Cooper's hawk is considered a SSC species by the CDFW. SWCA observed a Cooper's hawk perched in a deciduous arroyo willow on the bank of Shepard Reservoir during the survey. Cooper's hawk is a larger accipiter hawk that ranges throughout the United States and is widely distributed throughout California. This species is a resident of San Luis Obispo County, nesting and foraging in and near deciduous riparian areas. The Cooper's hawk occupies forests and woodlands, especially near edges. It is rarely found in areas without dense tree stands or patchy woodland habitat. Nests are built in deciduous trees usually 20 to 50 feet above ground. The reservoir drainages, the Stenner Creek riparian area, and the windrow trees in the Plant Sciences study area could support nesting Cooper's hawks. The pastures in the Oppenheimer study area provide foraging habitat. Removal of the windrow trees in the Plant Sciences study area could impact nesting raptors, inclusive of Cooper's hawk. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Grasshopper sparrow. Grasshopper sparrow is considered a SSC species. This species is a locally uncommon summer visitor in the breeding season from March to September. The species breeds in open grasslands, pastures, ruderal fields, sparse scrublands, grain fields and prairies that are located on rolling hills. These sparrows migrate from Canada to the southern United States, Mexico and Central America. Grasshopper sparrows build their nest on the ground under vegetation, and forage on the ground feeding mostly on insects and seeds. The pastures in the Opennheimer study area provide marginal nesting and foraging habitat. Grading activities conducted in the spring and summer months could impact this locally uncommon species during its nesting period. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant.

Great blue heron. Great blue heron is protected by the MBTA and is common throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. This species may be found foraging for small mammals in the pasture lands located in the Oppenheimer study area; however, neither of the study areas provide nesting habitat. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Ferruginous hawk. This large hawk is protected by the MBTA and winters around California's open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats. It forages for lagomorphs, ground squirrels, and mice. This species may be found foraging for small mammals in the pasture lands located in the Oppenheimer study area. Neither of the study areas provide nesting habitat for this species. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Western yellow-billed cuckoo. The western yellow-billed cuckoo is a federal candidate for listing and a state endangered species. It is a casual spring and fall transient in San Luis Obispo County. Although its historic status within the county is unknown, it was likely a regular breeder in large cottonwood-willow

riparian woodlands. There are only eight San Luis Obispo County records for the species over the last 50 years, two of which pertain to nesting birds. The County's two nesting records involve a fledgling collected in San Luis Obispo in 1921 (San Bernardino County Museum) and an egg set taken in 1932 at "Mile's Station" in upper Avila Valley, which is incorrectly mapped by the CNDDB as a City of San Luis Obispo record (Edell 2004). There are no known recent nesting records in San Luis Obispo County and there are no known breeding locations outside of the currently known breeding locations, none of which occur in San Luis Obispo County (Edell 2004). The riparian area of Stenner Creek supports suitable nesting habitat for this subspecies. The proposed project will not impact the Stenner Creek riparian corridor; therefore, impacts to this species are not expected.

White-tailed kite. White-tailed kite is protected by the MBTA and is a Fully Protected Species under California Fish and Game Code. This species forages in open habitats and nests in tall trees near the foraging areas. The riparian corridor of Stenner Creek, the windrow trees in the Plant Sciences study area, and the reservoir drainages support marginal nesting habitat and the pasturelands provide foraging habitat. Removal of the windrow trees in the Plant Sciences study area could impact nesting raptors, inclusive of white-tailed kite. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

California horned lark. The California horned lark is considered a SSC species. It is ground-dwelling bird that is a widespread occupant of open habitats across North America. It inhabits areas with sparse vegetation and exposed soil. In western North America, this species is associated with desert scrub, grasslands, and similar open habitats, as well as alpine meadows. The pastures in the Oppenheimer study area provide marginal nesting and foraging habitat. Grading and construction activities in the pastures could directly impact ground nesting birds, inclusive of California horned lark. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant.

Merlin. The merlin is a small falcon that winters in California and the plains states and breeds in Canada and Alaska. It is protected by the MBTA. Like most falcons, this species preys on small birds. The Oppenheimer study area provides suitable foraging habitat for this species in the winter months. This species is not expected to breed in the project study areas or California. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Loggerhead shrike. The loggerhead shrike is considered a SSC species. It is a medium-sized passerine (perching) bird that ranges from southern Canada to southern Mexico and from the Gulf States west into California. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Nests are built on a stable branch in a densely foliaged shrub or tree, usually well concealed and 1.3 to 50 feet above ground. The riparian corridor of Stenner Creek, the windrow trees, and the reservoir drainages support marginal nesting habitat and the pasturelands provide foraging habitat. Removal of the windrow trees in the Plant Sciences study area and the remnant coastal scrub near Shepard Reservoir could impact nesting birds, inclusive of loggerhead shrike. Pre-disturbance nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Purple martin. The purple martin is considered a SSC species. At one time, the species was a fairly common breeder in the Coast Range, but in the last 15 years there has been a dramatic decrease in California. The purple martin inhabits hardwood, hardwood-conifer, riparian, and coniferous habitats. It usually nests in old woodpecker cavities, but will occasionally nest in man-made structures. The riparian corridor of Stenner Creek, the windrow trees, and the reservoir drainages support marginal nesting habitat and the pasturelands provide foraging habitat for this species. Removal of the windrow trees in the Plant Sciences study area could impact nesting birds, inclusive of purple martin. Pre-disturbance

nesting bird surveys are recommended to avoid impacts to nesting birds. Therefore, potential impacts would be mitigated to less than significant. Since the areas surrounding the project study areas include thousands of acres of grassland habitats, the small loss of foraging habitat in the project areas is not significant.

Other raptors and birds. The pastures and riparian areas within the project study areas provide suitable breeding and foraging habitat for a variety of native and migratory birds. The modification of approximately 11 acres of pastureland represents a small percentage of the available habitat both within the University campus and proximate areas, which include large spans of open space and rangeland in the immediate area. Some foraging and roosting/perching habitat would be available for birds within grassland and vegetation to remain within the project areas.

Pallid bat, Townsends big-eared bat, Western mastiff bat, big free-tailed bat. Different bat species utilize resources in different ways. For instance, Townsend's big-eared bat and western mastiff bat commonly utilize trees for day and/or night roosts. However, Townsend's big-eared bat require caves, mines, rock faces, or structures with specific microclimates for maternity roosts and western mastiff bat will use trees for maternity roosts (National Audubon 1996). SWCA did not observe any bat species while conducting the field survey. CNDDB documents occurrences of these bat species near Cal Poly, all of which are SSC. Removal of windrow trees and demolition of existing buildings could impact roosting bat species. Pre-disturbance bat surveys are recommend to minimize the potential for this impact to occur. Therefore, potential impacts would be mitigated to less than significant.

b, c. Stenner Creek, Shepard Reservoir, and Smith Reservoir, are state and federal jurisdictional features. The reservoir drainages lack OHWM and do not fall within federal jurisdiction, but do support bed and bank features and, therefore, do fall within state jurisdiction (SWCA 2015). As currently proposed, there are three locations where the proposed project could encroach on the jurisdictional areas and trigger the need for Clean Water Act and California Fish and Game Code permitting. The proposed southeastern detention basin in the Phase 1 area encroaches on the USACE jurisdictional wetlands and the surrounding CDFW jurisdictional riparian habitat of Smith Reservoir (refer to Figure 8). If the detention basin is constructed in the proposed location, the University would need to obtain Clean Water Act Section 401 and 404 authorizations and a Streambed Alteration Agreement from CDFW. The need for permits could be avoided by relocating the proposed detention basin to the northeast and outside of the jurisdictional boundaries. The proposed Phase 1 fill area that is situated between Shepard and Smith reservoirs encroaches on the USACE jurisdictional wetlands of Shepard Reservoir. If the outer extent of the fill area is constructed in the proposed location, the University would need to obtain Clean Water Act Section 401 and 404 authorizations and a Streambed Alteration Agreement from CDFW. The need for this permitting can be avoided by ensuring that the proposed fill does not encroach on the jurisdictional boundaries of Shepard Reservoir. The proposed bridge crossing over the Drumm Reservoir drainage has the potential to impact the CDFW and RWQCB jurisdictions of the Drumm Reservoir Drainage. If the final design of the bridge crossing requires ground-disturbing activities within the banks of the drainage, installation of the bridge would require RWQCB and CDFW permitting.

The Stenner Creek riparian area and the freshwater marsh habitats in the reservoirs are considered to be sensitive natural communities. The proposed project should be constructed in such a way that avoids impacts to these communities. Avoiding direct impacts to the communities would avoid the need to obtain permits from the regulatory agencies. Potential indirect impacts to these habitats and features include inadvertent disturbance by equipment, additional foot traffic, and discharge of sediment and other pollutants. Measures to avoid these direct and indirect impacts are provided below.

Compliance with existing regulations (i.e. preparation of a SWPPP) and identified mitigation (BR-1 through BR-5 and BR-9, below) would address these potential impacts (refer to Section III Air Quality, Section VI Geology and Soils, Section VIII Hazards and Hazardous Materials, and Section IX Hydrology and Water Quality). Therefore, potential impacts would be mitigated to less than significant.

d. The University is located along the Pacific Flyway, an important migratory route for many birds traveling between North and South America. Riparian areas, freshwater marshes, and other wetland areas are particularly important areas to migratory birds of the Pacific Flyway (also refer to the discussion above,

see a.). The project areas are currently developed or utilized for agriculture and/or livestock. As such, the project areas are enclosed by fencing and do not provide migration linkages for terrestrial common or special-status wildlife; therefore, the sites would operate similar to existing conditions after the projects are complete. Therefore, the project would not substantially interfere with wildlife movements or behaviors, aside from impacts identified above (see discussion under a.).

e. The project would not conflict with University policies regarding biological resources. The University does not have an adopted tree preservation policy. Master Plan policies that address biological resources generally call for the siting of new development proximate to or within existing developed areas, and avoidance of sensitive areas such as creeks. The project is located within an area currently and historically used for teaching, livestock and/or agriculture, the development area is located adjacent to jurisdictional waters of the State and United States. With exception to the bridge crossing, the project avoids identified sensitive habitats including drainages and vegetative communities. Therefore, the project is consistent with guidance provided in the Master Plan, and impacts are less than significant.

f. The project site is not within an area subject to a Habitat Conservation Plan (HCP) or Natural Community Conservation Planning (NCCP), or other local or regional conservation planning document. There is no impact.

Mitigation Measures

MM AIR-1 (Dust Control); HM-1 through HM-5 (Hazardous Materials Spill, Leak, Exposure and Fire Risk Minimization); HYD-1 through HYD-5 (Protection of Water Quality)

BR-1 Prior to construction of the proposed bridge over the Drumm Reservoir drainage, the University shall prepare project specific plans for the bridge crossing. If the bridge crossing requires any earthwork within the banks of the drainage, the University shall enter into a Streambed Alteration Agreement with CDFW and obtain a Waste Discharge Requirement authorization from RWQCB. If the bridge project spans the banks of the drainage and avoids all ground disturbing activities between the drainage banks, regulatory permitting may not be necessary.

BR-2 Prior to construction, the University should design the proposed south eastern detention basin and the proposed fill area in Phase 1 of the project to avoid the jurisdictional boundaries of Shepard and Smith reservoirs. Avoidance of the jurisdictional areas can be achieved by shifting the detention basin to the northeast so that it is outside of the riparian boundary of Smith Reservoir and ensuring that the proposed fill around Shepard Reservoir does not extend north of the Shepard Reservoir access road. If these design changes are not feasible, the University shall coordinate with CDFW, USACE, and RWQCB to obtain the appropriate permits for direct impacts to the jurisdictional features.

BR-3 Prior to construction, the University shall retain a qualified biological monitor. The biological monitor shall prepare a monitoring plan for review and approval by the University. Full-time monitoring will occur during vegetation removal, and erosion control installation. Monitoring may be reduced to part time once construction activities are underway and the potential for additional impacts are reduced. The plan shall include, but not be limited to:

a. Goals, responsibilities, authorities, and procedures for verifying compliance with environmental mitigation measures;

b. Lines of communication and reporting methods;

c. Daily and weekly reporting of compliance;

d. Authority to stop work, and the conditions that would require such action; and

e. Action to be taken in the event of non-compliance.

BR-4 Upon preparation of construction plans, and prior to ground disturbance, the plans shall delineate "Environmentally Sensitive Areas" to protect the reservoirs, the reservoir drainages, and the Stenner Creek riparian area. The Environmentally Sensitive Area shall be demarcated by and wholly include

the outer extent of riparian vegetation in drainages and Stenner Creek. Highly visible temporary construction fencing shall be installed along the boundary of the "Environmentally Sensitive Areas" and shall remain in place until the biological monitor recommends removal. No ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Areas." All project site designs shall incorporate a minimum 30 feet buffer from the Environmentally Sensitive Areas where no structures or other impermeable surfaces may be installed.

BR-5 To avoid the potential to adversely modify stormwater and ground water inputs to Steelhead Critical Habitat in Stenner Creek, Phase IV of the project shall not include drilling any new wells in the Plant Sciences Study Area. In addition, if the proposed project increases the area of impermeable surfaces in the Plant Sciences Study Area, the project designs shall ensure that all stormwater is captured and retained on-site in such a way that the captured stormwater is allowed to percolate into the Stenner Creek system. The project shall not include direct or point source outfalls into the Stenner Creek riparian corridor, but may include stormwater detention basin(s) that allow captured stormwater to percolate on-site.

If the proposed project cannot avoid modifications to the hydrologic inputs to Steelhead Critical Habitat in Stenner Creek, the University shall conduct and prepare a hydrologic study that evaluates and quantifies the project's potential to adversely affect hydrologic inputs to Stenner Creek. Upon completion of the study, the University shall consult with National Marine Fisheries Service to determine if the proposed project would adversely modify Steelhead Critical Habitat. If Agency coordination determines the project would result in adverse impacts to Steelhead Critical Habitat as designed, the University shall incorporate National Marine Fisheries Service recommendations into project design to avoid adverse impacts.

BR-6 To avoid the potential for take of California red-legged frog that may disperse through the Phase 1 horse pastures, all initial ground disturbing activities in the Phase 1 area between Shepard Reservoir and Smith Reservoir and in the horse paddocks southeast of Smith Reservoir shall be completed in the dry season (between June 1st and September 31st). Initial grading activities in these areas shall not occur after the first fall rains and before May of any year.

BR-7 Prior to initiation of construction and demolition activities, the biological monitor shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the special-status species potentially present in the area, jurisdictional habitats present proximate to the project site, California red-legged frog and its habitat, the specific measures that are being implemented to protect special-status species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BR-8 Prior to tree removal and building demolition, the biological monitor shall inspect the trees and buildings to be removed for the presence of roosting bats. The pre-disturbance surveys shall include two day-time and two dusk inspections and shall be conducted by qualified biologists no more than 30 days prior to the tree removal or building demolition. The biologist(s) conducting the pre-construction surveys will also identify the nature of the bat utilization of the area (i.e., no roosting, night roost, day roost, maternity roost). If bats are found to be roosting, project activities shall be delayed until the bats have left the area.

BR-9 All refueling, maintenance and staging of equipment and vehicles shall occur at least 60 feet from wetland habitat, riparian areas, or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. The monitor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the University shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take shall a spill occur.

BR-10 Project areas to remain undeveloped shall be revegetated with an assemblage of vegetation suitable for the area. Invasive, exotic plants shall be controlled to the maximum extent practicable.

BR-11 Prior to and during construction, the qualified biologists shall conduct surveys for silvery and black legless lizards in the coastal scrub located adjacent to Shepard Reservoir. The qualified biologists shall capture and relocate any SSC species (if present) or other native species to suitable habitat outside of the area of impact. If discovered, observations of SSC species or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

BR-12 Prior to construction, if construction activities are proposed to occur during the typical nesting season (which is February 15 to August 31) within 200 feet of potential nesting habitat, a nesting bird survey shall be conducted by qualified biologists no more than two weeks prior to construction to determine presence/absence of nesting birds within the project area. Work activities shall be avoided within 100 feet of active passerine nests and 200 feet of active raptor nests until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. The University shall be contacted if any state or federally listed bird species are observed during surveys. Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.

BR-13 Vegetation removal in potential nesting habitats shall be monitored and documented by the biological monitor(s) regardless of time of year.

BR-14 During construction, the biological monitor shall ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed.

Conclusion

The two project study areas are largely developed and have historically, been used for educational facilities, equestrian grazing, horticultural services, row crops, and other agricultural related activities. The project areas are located adjacent to state and federal regulated drainages and wetland areas that provide habitat for special-status species as described above. With implementation of the recommended avoidance measures, the proposed project can be designed to avoid direct impacts to the jurisdictional features and associated sensitive habitats. Depending on the final project designs, the bridge crossing over the Drumm Reservoir drainage, will likely require permitting under Section 1600 of the California Fish and Game Code and the Porter Cologne Water Quality Control Act. The various landscape and windrow trees, horse pastures, and low-use buildings in the study areas provide suitable habitat for nesting bird species. The windrow and landscape trees and the low-use buildings in the project areas could support roosting bat species. The remnant coastal scrub located adjacent to Shepard Reservoir may support silvery and/or black legless lizards. Although unlikely, California red-legged frog could disperse from the Shepard or Smith reservoirs through the pastures that are situated between the reservoirs. Adverse effects and/or take of California red-legged frog must be avoided to ensure compliance with the Federal Endangered Species Act. Strategic timing of Phase 1 can serve to avoid adverse effects and take of California red-legged frog. Based on the existing conditions in the project sites and the proposed project elements, there is a low potential for the above mentioned resources to be impacted by the proposed project. Implementation of the recommended avoidance and minimization measures will serve to avoid or reduce the impacts to less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New Impact
V. CULTURAL RESOURCES				
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		X		
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		X		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d. Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion of Checklist Answers

a. Cal Poly was established on March 8, 1901, and was touted as a co-educational vocational school, which formed the basis for the current "Learn by Doing" campus motto. The university underwent several phases of growth and change over the twentieth century. Cal Poly's campus began modestly, with an administrative building, a boys' dormitory, and classrooms. Cal Poly played a pivotal role in the education and training of soldiers and civilians before, after, and during World War II. The campus housed a United States Naval Flight Preparatory School and served as the state headquarters for the Food Production War Training Program. The latter half of the century saw Cal Poly grow in student body and campus infrastructure. Dozens of new buildings were erected including the Fisher Science Building, the Robert E. Kennedy University Library, the Foundation Administration building, new Faculty Offices, and the Dairy Science Facility.

Eleven historic-period architectural resources (i.e., resources that are 50 years of age or older) are located within the project study areas and are listed in Table 6 below. An Architectural Resource Evaluation Report was prepared in support of the proposed project to evaluate the significance of the historic-period structures and is included in Appendix D (Carr 2017).

Table 6. Historic-Period Architectural Resources within the Project Areas

Building Number	Building Name	Occupancy Date	California Historical Resource Status Code
032-C	Equine Center Breeding Barn	3/1/1940	6Z
032-E	Equine Center Stallion Barn	3/1/1940	6Z**
032-F	Equine Center Horse Barn	3/1/1940	6Z
032-O	Cal Poly Equine Center (Mare Barn)	3/1/1940	3CS*
048-A	Environmental Horticulture Science Residence	1/1/1938	6Z
016-A	Beef Unit Herdsman Residence	1/1/1938	6Z
016-O	Beef Unit	1/1/1952	6Z
016-B	Beef Unit Feed Unit	1/1/1952	6Z
017-O	Crop Science	8/1/1962	6Z

Table 6. Historic-Period Architectural Resources within the Project Areas

Building Number	Building Name	Occupancy Date	California Historical Resource Status Code
017-D	Crop Science Irrigation Pipe Storage	8/1/1962	6Z
017-E	Crop Science Storage	8/1/1962	6Z

Notes: * Appears eligible for California Register as an individual property through survey evaluation
** Found ineligible for National Register, California Register or Local designation through survey evaluation
Source: Cal Poly

All eleven of the historic-period architectural resources in the project areas were constructed during Julian A. McPhee's 33-year tenure as President, between 1933-1966. Based on the research conducted and the December 7 site visit, of these, only the Mare Barn (032-O), constructed in 1940, meets the eligibility criteria for listing in the California Register of Historical Resources.

The Mare Barn is a long, rectangular, side-gabled frame building located within the Phase 1 project area, just west of the proposed stallion barn facility (refer to Figures 4 and 5). A full-length corridor, sheltered under the extended roof, is located on the east side of the building, which is clad and sealed with the original V-groove rustic wood siding. Roofing material is composition shingle, replacing the original rigid asbestos shingles. The roofline is dominated by the original decorative cupola, pierced to resemble a dovecote. Stall doors, metal grates and window openings are also original. Although moved onsite from another location in 1960, the Mare Barn retains integrity of materials, workmanship, design, feeling, and association. Its construction and intended use are strongly linked to the evolution and funding of the California Polytechnic School as a state institution.

Building No. 032C - the Equine Center Mare Barn, meets one of the four criteria for listing in the California Register of Historical Resources and therefore constitutes a historical resource for the purpose of CEQA. The Mare Barn, constructed in 1940, is eligible under Criterion 1: "Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States".

The Mare Barn demonstrates its eligibility through its strong association with California Polytechnic School's Thoroughbred Breeding Program, inaugurated in 1940 under President Julian McPhee; its association with the School's curriculum emphasizing vocational "learn by doing" training; and its strong association with pari-mutuel wagering, the School's primary source of funding in the years 1940-1942. These years also mark the transition of the School from a strictly vocational training institution to a college authorized to confer the Bachelor of Science degree in specific areas. The period of significance is therefore 1940-1942, and the footprint of the building is the boundary of the historical resource.

Based on the current Phase 1 project plans, the Mare Barn structure (Building 032-O) is located within the Phase 1 disturbance boundary and is proposed to be demolished. The Mare Barn is a significant surviving resource from the very beginnings of equestrian science on the Cal Poly campus. Specifically designed by William K. Bartges of the State Division of Architecture for the Thoroughbred Horse Breeding program, the Mare Barn clearly embodies its express purpose, as well as the School's Learn-by-Doing philosophy. The distinctive cupola and welded iron gates were made in the School's Metal Shop, and the building itself was built by staff and students. The project could cause a substantial adverse change in the significance of a historical resource as defined in §15064.5; however, thorough documentation of the existing Mare Barn as well as preservation of the distinctive cupola and at least one of the welded iron gates would reduce potential impacts to be less than significant in accordance with the Secretary of the Interior's standards for preservation. Therefore, this impact is considered potentially significant but mitigable.

b. The project area was historically occupied by the northernmost subdivision of the Obispeño Chumash, with the Salinan bordering to the north. However, the precise location of the boundary between the Chumashan-speaking Obispeño Chumash and their northern neighbors, the Hokan-speaking Playanos Salinan, is currently the subject of debate.

Based upon a review of cultural resources files housed at the California Historical Resources Information System's Central California Information Center at the University of California Santa Barbara, a previously identified prehistoric archaeological site, CA-SLO-2280, is located within the Phase 2 project area. The site consists of a marine shell and flaked stone scatter located within a landscaped garden area. At the time of its original documentation, site constituents included multiple varieties marine shell and a Monterey chert biface. The site is located in a developed area and has been subject to extensive historic and modern disturbance from the original construction of the Ornamental Horticultural Unit and associated landscaping. The cultural deposit is situated in a secondary context and does not appear to retain integrity. Prehistoric site CA-SLO-2280 has not been evaluated for the California Register of Historical Places. Given the conceptual nature of the proposed project, specific project-related impacts to CA-SLO-2280 associated with proposed ground-disturbing activities and final site design that may occur during project implementation are unknown at this time. If possible, physical disturbance within the identified CA-SLO-2280 site boundary should be avoided. Additionally, archaeological monitoring shall occur during ground disturbing activities to avoid potential impacts to CA-SLO-2280. Therefore, impacts are expected to be less than significant with mitigation.

c. The project area is underlain by Franciscan Complex (KJf) deposits of the Coast Ranges, a Cretaceous and Jurassic sandstone with smaller amounts of shale, chert, limestone, and conglomerate (USGS 1958). This deposit primarily consists of variably deformed and metamorphosed sandstone, graywacke, mudstone, and chert. It is rare to find fossils within the Franciscan Complex, as this formation is heavily deformed and metamorphosed in many locations, a process that destroys fossils; however, significant finds have been documented within this formation including trace fossils, mollusks, and marine reptiles. There are no known paleontological resources within the project areas or vicinity and implementation of the project is not anticipated to require deep grading to accommodate construction activities. It is possible however, that previously unidentified paleontological resources may be discovered and/or impacted during ground-disturbing activities. Mitigation has been provided below to address the discovery of previously unidentified paleontological resources. Therefore, impacts to paleontological resources are considered potentially significant but mitigable.

d. If human remains are unearthed, the University and contractor will comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts would be less than significant through compliance with existing state law.

Mitigation Measures

CR-1 Prior to any impacts to the Mare Barn (Building 032-O), the following shall occur:

a. The following interior and exterior documentation of the Mare Barn (Building 032-O) shall occur:

- Floor plans and elevations;
- Interior and exterior descriptive analysis; and,
- Creation of a photographic record.

b. The cupola and iron gate (at least one gate) features shall be preserved and retained by the University. The cupola shall be repurposed as an interpretive exhibit within the Equine Unit or

Environmental Horticultural Science Unit on campus. The iron gate shall be retained and preserved by the University, either in the archives, or for future re-use.

c. In-depth interviews shall be conducted with early members of the Equestrian Science program that are familiar with the construction of the structure, if feasible.

CR-2 Prior to ground disturbance, the University shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior Professional Qualification Standards for archaeology. The archaeological monitor and a Chumash representative shall be present during initial vegetation clearing, site "grubbing," and grading in previously undisturbed project areas for each project phase. This will allow for the identification of any previously unidentified resources that may be visible on the ground surface. The presence of the archaeological monitor shall be limited to initial construction activities until a determination is made in the field by the archaeological monitor whether additional archaeological resources are present. The archaeological monitor shall submit a monitoring report to the University following completion of all required monitoring activities.

CR-3 In the event unknown archaeological resources are exposed or unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the archaeologist determines that the resource is an "historic resource" or "unique archaeological resource" as defined by California Environmental Quality Act Guidelines Section 15064.5 and avoidance is not feasible, further evaluation by the archaeologist shall occur. The archaeologist's recommendations for further evaluation may include a Phase II testing and evaluation program to assess the significance of the site. Resources found not to be significant will not require mitigation. Impacts to sites found to be significant shall be mitigated through implementation of a Phase III data recovery program. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall monitor any mitigation work associated with prehistoric cultural material.

CR-4 Upon preparation of construction plans, the plans shall delineate a buffer surrounding the boundaries of the documented archaeological site (CA-SLO-2280). The area shall be labeled as an "Environmentally Sensitive Area". Highly visible temporary construction fencing shall be installed along the boundary of the 50-foot buffer, and shall remain in place until the archaeological monitor recommends removal. If feasible, no ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Area". Archaeological monitoring shall occur during all construction activities occurring within 50 feet of the boundary of prehistoric archaeological site CA-SLO-2280. Upon completion of archaeological monitoring, an archaeological monitoring report shall be prepared and submitted to Cal Poly and the Central Coast Information Center at the University of California Santa Barbara.

CR-5 Prior to issuance of grading and construction permits, an Archaeological Monitoring Plan shall be prepared by a qualified archaeologist. The plan shall include, at minimum:

a. List of personnel involved in the monitoring activities including a Native American monitor;

b. Clear identification of what portions of the project area in relation to CA-SLO-2280 shall be monitored;

c. Description of how the monitoring shall occur;

d. Description of monitoring frequency;

e. Description of resources expected to be encountered;

f. Description of circumstances that would result in the "work diversion," in the case of discovery, at the project site;

g. Description of procedures for diverting work on the site and notification procedures; and

h. Description of monitoring reporting procedures.

CR-6 If soil excavation associated with grading activities requires disturbance of bedrock formations, a qualified paleontologist will be retained to monitor construction activities in those areas. Should any vertebrate fossils or potentially significant finds (e.g., numerous well-preserved invertebrate or plant fossils) be encountered during work on the site, all activities in the immediate vicinity of the find shall cease until the qualified paleontologist evaluates the find for its scientific value. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. If monitoring is required, the qualified paleontologist shall submit a monitoring report to the University following completion of all required monitoring activities.

CR-7 If human remains are unearthed, the University and contractor shall comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo (County) Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Conclusion

Implementation of the proposed mitigation measures, including documentation and preservation of distinctive features associated with the Mare Barn (Building 032-O), and avoidance and monitoring to ensure no impacts to CA-SLO-2280 will occur during project implementation, will reduce potential impacts to be less than significant. Mitigation is also identified that would address incidental discovery of previously unidentified archaeological and paleontological resources and human remains. Therefore, potential impacts would be mitigated to less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New Impact
VI. GEOLOGY AND SOILS				
Would the project:				
a. Expose people or structure to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?				X
b. Result in substantial soil erosion or loss of topsoil?			X	

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New Impact
c. Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Background

Based on the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001), none of the project areas are located in a geologically hazardous area. The topography of the Phase 1, 2, and 3 sites is gently to moderately sloping and are currently developed. The topography of the Phase 4 site is generally flat and is partially developed with the existing Crops Unit facilities.

Discussion of Checklist Answers

a.i. The project site is located within a seismically active area of California. The project site is not identified on any Alquist-Priolo Earthquake Fault Zones maps (California Department of Conservation, Division of Mines and Geology 1990); however, the Los Osos Fault, located approximately 3 miles southwest from the project site, is identified under the Alquist-Priolo Earthquake Fault Zone Act and has been active within the last 11,000 years (City of San Luis Obispo 2014). The project site is proximate to several other faults in the central California region including the San Andreas, Nacimiento, Rinconada, Cambria, West Huasna/Oceanic, and Edna faults among smaller, local faults (Cal Poly 2001). Due to the presence of faults within proximity to the project area and the questionable activity level of these faults, the potential for ground rupture to occur on the project site resulting in damage from surface rupture or fault displacement would be a potentially significant impact. All new building design projects shall be consistent with the California Building Code and the CSU Seismic Policy (CSU 2015). With incorporation of these required design standards, impacts would be less than significant.

a.ii. The Los Osos Fault, located approximately 3 miles southwest of the site, and the San Andreas Fault, located near Parkfield, California, along with other local and regional fault systems, pose risks to the project associated with groundshaking. The most significant event for design of structures is a 6.8 magnitude event along the Los Osos Fault (City of San Luis Obispo 2014). Project design is required to meet or exceed existing building code requirements and standard practices of the Structural Engineer Association of California. Compliance with existing codes and practices will be sufficient to address risks associated with groundshaking. Impacts are considered less than significant.

a.iii. Liquefaction is amplified groundshaking or instability associated with unconsolidated alluvium. Based on County of San Luis Obispo data, the potential liquefaction hazard is low. The proposed facilities would be subject to, and would be required to comply with, the Uniform Building Code which would ensure structural integrity of the proposed project would not be compromised due to liquefaction potential. Final engineering for the maintenance building and all other structural foundations would consider liquefaction potential in the project design. Therefore, impacts would be less than significant.

a.iv. According to the *Cal Poly Master Plan and Final EIR*, Exhibit 6.3, the proposed project areas are not area identified as a potential landslide area (Cal Poly 2001), and the topography of the sites range from generally flat to gently sloping. Impacts would not occur.

b. The proposed project includes the excavation, relocation, and placement of soil for Phases 1, 2, and 3, as well as grading activities for the construction of the new facilities across all project phases. The project also includes landscaping to stabilize disturbed soils following the construction of the new facilities (refer to Figure 5). The soil types present within the project areas are identified as having a slight erosion hazard (NRCS 2017). During construction, the project would be required to implement erosion control measures stipulated in a stormwater pollution prevention plan (SWPPP) pursuant to the National Pollutant Discharge Elimination System discharge requirements. Therefore, during construction and over the life of the project, erosion control measures and pollutant discharges would be reduced to levels that are less than significant. Therefore, impacts are considered less than significant.

c. Based on review of the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001) and review of available soils and geologic information (NRCS 2017; County of San Luis Obispo 2017), there are no geologic or soil units with the potential for instability. The project would not locate new facilities on steep slopes and the proposed facilities would be subject to, and would be required to comply with, the Uniform Building Code which would ensure structural integrity of the proposed project would not be compromised due to geologic and soil conditions. Final foundation engineering would consider on-site geotechnical conditions in final engineering and project design. Therefore, impacts would be less than significant.

d. Expansive soils tend to swell with seasonal increases in soil moisture, and shrink during the dry season as soil moisture decreases. These changes can stress and damage slabs, flatwork, and foundations if not addressed. Measures typically recommended to address expansion include amendment of fill material and pre-moistening of subslab materials, use of deepened foundations and a layer of non-expansive material beneath slabs, thickened edges and a layer of non-expansive material beneath flatwork, among other measures. Assuming the underlying soils may be expansive, compliance with standard engineering practices would address this potential impact, and reduce it to less than significant.

e. The project would not include an onsite wastewater disposal system; therefore, there is no impact.

Mitigation Measures

None required beyond compliance with existing regulations, codes, and standards.

Conclusion

Impacts are considered less than significant based on compliance with existing codes and standards, and preparation and implementation of a SWPPP.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
VII. GREENHOUSE GAS EMISSIONS **Would the project:**				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X		

Discussion of Checklist Answers

The information in this section is based on the Air Quality and Greenhouse Gas Impact Assessment prepared in support of the proposed project and included as Appendix B (Ambient Air Quality and Noise Consulting 2017).

a. Greenhouse gas (GHG) emissions would be generated from construction and operation of the proposed project. The SLOAPCD has adopted general screening criteria to determine the type and scope of projects requiring an air quality and GHG assessment. The screening criteria are based on the SLOAPCD's bright line threshold for annual GHG emissions in units of metric tons of carbon dioxide equivalent (MT CO2E) per year. Table 1-1, Operational Screening Criteria for Project Air Quality Analysis, of the SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2012) indicates that the screening criteria for a 4-year university or college expected to exceed the SLOAPCD annual GHG bright line threshold of 1,150 MT CO2E per year from operational and amortized construction impacts is 464 students. Although the project would not result in an increase in students on campus, it would generate GHG emissions during construction. SLOAPCD guidance indicates that the short-term GHG emissions from the construction phase should be amortized over the life of the project, which is 25 years for commercial projects. Project-generated construction GHG emissions are anticipated to be negligible when amortized over 25 years (refer to Table 7 below). Development of the proposed project would not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts (refer to Table 7 below). Regardless, Cal Poly San Luis Obispo's Campus Master Plan and EIR mitigation, and SLOAPCD rules, regulations, and policies would be applied as applicable.

Short-term Construction GHG Emissions. Estimated increases in GHG emissions associated with construction of the proposed project are summarized in Table 7. Based on the modeling conducted, annual GHG emissions associated with construction of the proposed project would range from approximately 292.4 to 524.4 $MTCO_2e$. In total, project construction would generate roughly 1,422 $MTCO_2e$. Amortized GHG emissions, when averaged over the assumed 25-year life of the project, would total approximately 56.88 $MTCO_2e$/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted.

Table 7. Comparison of Unmitigated CO2e Emission Impacts to SLOAPCD Significance Thresholds

Project Phase	GHG Emissions (MT CO2e/year)[a]
Phase 1	300.1
Phase 2	305.1
Phase 3	524.4
Phase 4	292.4
Construction Total	1,422.0
Amortized Net Change in Construction Emissions	56.88
GHG Bright-line Threshold [c]	1,150
CO2e Emissions Exceed Threshold?	No

a Project emissions are the sum of the amortized construction CO2e emissions and operational CO2e emissions.
b CO2e emissions include emissions of CO2, CH4, N2O, HFC, CFC, and F6S.
c Emission thresholds taken from "CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review," SLOAPCD, April 2012.

The sum of the project's amortized construction emissions (over 25 years) plus operational-related GHG emissions is less than 1,150 metric tons per year; therefore, the project's greenhouse gas emissions levels would not exceed stated thresholds. Impacts are considered less than significant.

Long-term Operational GHG Emissions. Estimated long-term increases in GHG emissions associated with the proposed project are summarized in Table 8. At buildout year 2013, annual operational GHG emissions would total approximately 1,188.7 $MTCO_2e$/year. With the inclusion of amortized construction emissions, operational GHG emissions would total approximately 1,245.6 MTCO2*e*/year at buildout year 2023 and approximately 1,093.6 MTCO2*e* by year 2030. GHG emissions are projected to decrease in future years due largely to improvements in vehicle emissions and the increased use of renewable energy sources.

Table 8. Comparison of Unmitigated Operational GHG Emission Impacts to SLOAPCD Significance Thresholds

Project Phase/Operational Year	GHG Emissions (MT CO_2e/year)[a]
Year 2020 (Phase 1)	
Area Source[1]	0.0
Energy Use[2]	31.3
Motor Vehicles	0.0
Waste Generation	5.9
Water Use and Conveyance	5.6
Total	42.8
Total with Amortized Construction Emissions	99.6
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	No
Buildout Year 2023 (Phase 1-4)	
Area Source[1]	0.0
Energy Use[2]	753.4
Motor Vehicles	116.1
Waste Generation	188.0
Water Use and Conveyance	131.3
Total	1,188.7
Total with Amortized Construction Emissions	**1,245.6**
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	**Yes**
Year 2030 (Phases 1-4)	
Area Source[1]	0.0
Energy Use[2]	639.5
Motor Vehicles	93.7
Waste Generation	188.0
Water Use and Conveyance	115.4
Total	1,036.7
Total with Amortized Construction Emissions	1.096.6
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	No

[1] Area source includes emissions associated with the application of architectural coatings, use of consumer products/agricultural products, and landscape maintenance.
[2] Includes adjustment for California Renewable Portfolio Standards requirements.
Source: Ambient Air Quality and Noise Consulting 2017 (Appendix B).

As depicted in Table 8, estimated GHG emissions for buildout year 2023 would exceed SLOAPCD's significance threshold of 1,150 $MTCO_2e$/year. As a result, this impact is considered potentially significant. Mitigation measures have been included to reduce operational GHG emissions, including those associated with energy use, waste generation, water use, and motor vehicle use. Mitigation measures have also been included to reduce emissions associated with project construction, including emissions of black carbon. With implementation of Mitigation Measure GHG-1, operational GHG emissions at buildout year 2023 would be reduced to approximately 1,125 $MTCO_2e$/year. Mitigated operational GHG emissions for future year 2030 would be reduced to approximately 977 $MTCO_2e$/year. With mitigation, operational emissions would not exceed SLOAPCD's significance threshold of 1,150 $MTCO_2e$/year. Therefore, potential impacts are considered less than significant with mitigation

b. In 2015-2016, Cal Poly prepared the PolyCAP. The PolyCAP quantifies the potential GHG reductions from over 80 proposed policies and measures to achieve the goal of climate neutrality and resilience across all sectors. PolyCAP includes policies to reduce GHG emissions associated with energy use, waste generation, water use, and motor vehicle use.

The proposed land use would be consistent with current zoning designations and general plan land use designations. However, the proposed project does not include GHG-reduction measures. If unmitigated, project-generated GHG emissions would conflict with GHG-reduction planning efforts, including those identified in the PolyCAP. As a result, this impact is considered potentially significant. Mitigation Measure GHG-1 includes measures to reduce construction and operational emissions of GHG's, including those associated with energy use, waste generation, water use, and motor vehicle use. Therefore, potential impacts are considered less than significant with mitigation

Mitigation Measures

In addition to the implementation of measures AQ-1 through AQ-8 identified under Section III Air Quality, the following mitigation measure is included to reduce GHG emissions associated with project construction and operation.

GHG-1 The following measures shall be implemented to reduce GHG emissions associated with project construction and operation. These measures shall be shown on grading and building plans:

a. Divert 65 percent of non-hazardous construction or demolition debris for recycling/reuse.

b. Install low-flow water fixtures and other water conservation measures sufficient to meet, at a minimum, CalGreen Tier 1 standards for water efficiency and conservation.

c. To the extent locally available, utilize pre-finished building materials or materials that do not require the application of architectural coatings.

d. Install energy-efficient appliances and building components sufficient to achieve overall reductions in interior energy use beyond those required at the time of development by CalGreen standards.

e. Utilize high efficiency lights in parking lots, streets, and other public areas.

f. New buildings shall be designed to accommodate rooftop solar photovoltaic systems.

g. On-site animal manure should, to the extent possible, be diverted to generate energy.

h. Plant drought tolerate landscaping and incorporate water-efficient irrigation systems where necessary.

i. Provide on-site facilities for the collection of recyclable materials.

j. Provide a designated parking space for alternatively fueled, carpool, or vanpool vehicles within the Phase 3 parking area.

k. The project site shall be designed to minimize barriers to pedestrian access, internally links all uses, and connects to all existing or planned external streets, public transit, and pedestrian facilities contiguous with the project site.

l. Implement traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.).

Conclusion

Mitigation Measure GHG-1 includes measures to reduce construction and operational emissions of GHG's, including those associated with energy use, waste generation, water use, and motor vehicle use. With mitigation, this impact would be considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?		X		

Background

The Cal Poly San Luis Obispo Environmental Health and Safety department oversees health and safety procedures and programs on campus, including facility construction and operations. The Environmental Health and Safety department develops and implements programs to ensure the safe use, handling, and storage of hazardous materials, and appropriate and compliant disposal of hazardous wastes. The department oversees and implements employee training programs, procedures and policies, and compliance surveys to this end.

A Phase I Environmental Site Assessment (Phase I ESA) was completed in support of the proposed project and is included in Appendix E (Haro Environmental 2017). The purpose of this assessment was to identify known, potential or historic recognized environmental conditions (RECs) resulting from historic and/or current uses of hazardous substances or petroleum products within the project areas.

The following RECs were identified and a discussion of the significance of each is presented below:

- The handling of pesticides and herbicides at the Environmental Horticulture Unit (EHU). The chemical handling and storage area is located at the south end of the EHU, within Building 048-M. Pesticide and herbicide storage was not observed in any of the other EHU buildings. Chemical mixing occurs adjacent to the storage building under a covered area on concrete, with floor drains. Various types and quantities of pesticides and herbicides were observed and several floor drains were observed in the area of the chemical storage. The floor drains in the area reportedly discharge to an approximately 1,500-gallon above-ground storage tank (AST) located downslope from Building 048-M. The AST appears to have adequate secondary containment, and no evidence of spills or leaks was observed. Reportedly, this AST is emptied by a contractor under hazardous waste manifest on an as-needed basis. Therefore, the presence of this AST and chemical handling at Building 048-M is not expected to pose a significant environmental concern to the project.
- Former evaporation pond near the current pesticide AST location. Reportedly, an evaporation pond was previously located in this area and used to collect rinsate from cleaning out chemical application equipment. This pond was reportedly not used to dispose of the residual chemicals in the application equipment or bulk chemicals. Because we have no evidence indicating this evaporation pond was used for anything other than rinsate from chemical application equipment, the former presence and use of an evaporation pond would not be expected to pose a significant environmental concern to the project.
- Small quantities of diesel fuel and gasoline were observed at the EHU, however, no significant spills or releases were observed in the area of fuel storage. Therefore, fuel storage is not expected to pose a significant environmental concern to the project.
- The presence of phosphoric acid within a storage shed near the Crops Unit (CU). No staining of the surface beneath the phosphoric acid was observed. Therefore, this chemical handling is not expected to pose a significant environmental concern to the project.
- Agricultural land use near the CU. Agricultural land use for row crops can include the use of herbicides and/or pesticides which can accumulate in soil. Particularly banned substances (e.g., DDT) can persist in soil for long periods of time, even after their application has been stopped. Although we have no evidence indicating DDT was used at the CU, agricultural soils may contain elevated levels of chemicals. Continued agricultural land use would not be expected to pose an environmental concern to the project.
- Chemical handling and mixing at the CU. Although pesticide4s and herbicides are stored at the CU, this project area does not include the chemical storage area. However, chemical application equipment is stored within the project area and may be a source of a release of agricultural chemicals to the environment.
- Electrical transformers. Several pad-mounted electrical transformers and one pole-mounted electrical transformer were observed within the project area. The pad-mounted transformers appeared to be relatively new and would not be expected to contain polychlorinated biphenyls (PCBs). In addition, staining of the surface beneath the transformers, including the pole-mounted transformer, was noted. Therefore, the presence of transformers within the project area would not be expected to pose an environmental concern to the project. An older optic fiber cable (OFC) switch was observed at the EHU adjacent to a pad-mounted transformer. Reportedly, this OFC switch was tested for PCBs, and the results

indicated the oil within this OFC switch contains 62 ppm PCBs. No visible staining of the concrete surface beneath the OFC switch was noted and it did not appear to be leaking fluid.

In summary, several RECs were identified; however, the significance of the RECs is low and are not expected to pose a significant environmental concern to the project (Haro Environmental 2017).

Discussion of Checklist Answers

a-c. The project will not create a substantial risk to people or the environment associated with the routine use, transport or disposal of hazardous waste. Relatively small amounts of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, cleaning products, and solvents, would be used on site for construction and maintenance activities. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. No acutely hazardous materials would be used on site during project construction.

Upset and accident conditions which may release hazardous materials into the environment are most likely during the construction phase of the project. Construction equipment, if damaged, can release fuel, oil, lubricants and other materials into the environment and expose workers and the campus population. Minor or accidental spills or leaks could result in public exposure to potentially hazardous materials both on and off-site, resulting in a potentially significant impact. These potential impacts would be reduced by compliance with existing Occupational Safety and Health Administration (OSHA) and California Division of Occupational Safety and Health (Cal/OSHA) construction standards. In addition, as discussed in Section VI Geology and Soils, and Section IX Hydrology, preparation and implementation of a SWPPP and Construction Spill Response Plan would be required, which would avoid or minimize the potential for off-site exposure. The campus requires contractors to prepare, maintain and implement management plans for upset and accident condition on-site, including protocols for stop work, spill containment, notification and remediation. These measures are considered sufficient to reduce risks associated with accidents. Impacts would be less than significant.

As discussed previously, agricultural land use for row crops, present within the Phase 4 project area, can include the use of herbicides and/or pesticides which can accumulate in soil. Although soils within the Phase 4 project area are not known to have been exposed to banned substances (e.g., DDT), it can persist in soil for long periods of time; therefore, soils within the Phase 4 project area may contain elevated levels of chemicals. No excavation or soil removal construction activities are proposed under Phase 4. Continued agricultural land use within the Phase 4 project area, such as the construction and operation of a new greenhouse facility is not expected to pose an environmental concern associated with soil conditions. Mitigation has been provided to ensure the OFC switch located in the EHU is removed and disposed of properly and that any soils required to be removed in the vicinity of the CU, the existing pesticide AST, or the former evaporation pond, are tested for elevated levels of pesticides, herbicides, and heavy metals to determine if they require special handling and/or disposal.

Construction activities at the project site could potentially disturb soils containing naturally occurring asbestos, and could result in the accidental release of hazardous materials to the environment and release of materials within 0.25 mile of an existing school (Cal Poly); no other schools are located within 0.25 mile of the project site. Mitigation has been included under Section III Air Quality to address potential impacts associated with naturally occurring asbestos, if present. No acutely hazardous materials aside from those used in standard construction would be used during construction activities and no hazardous materials aside from those already used for existing operations at the Equine Center, Environmental Horticultural Unit, and Crops Unit, would be used during operation. Emissions associated with the project are limited to typical construction emissions and are within applicable SLOAPCD thresholds. Impacts would be less than significant.

Operation of the proposed project would involve the regular storage, use, and disposal of potentially hazardous materials including fuels, mechanical oil, transformer oil, cooling fluid. The University may also apply herbicides to manage vegetation in and around the facility. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. In addition, the campus maintains a Hazardous Materials Management and Response Plan that addresses the handling of and risks associated with hazardous materials. The

project does not propose storage or use of new hazardous materials that would not be addressed by the existing Management Plan (Cal Poly 2001); additional mitigation is identified below to further mitigate potential impacts to campus agricultural land and surrounding areas. Therefore, impacts would be considered less than significant.

Therefore, based on compliance with existing regulations, the campus Hazardous Materials Management and Response Plan, SWPPP, Construction Spill Response Plan, and hazardous materials mitigation identified below, the project will not create a substantial risk to people or the environment associated with the routine use, transport or disposal of hazardous waste. Potential impacts would be mitigated to be less than significant.

d. There are no known hazardous waste or materials sites located within or adjacent to the project areas (Envirostor 2017; Geotracker 2017). There is no impact.

e-f. The project is not located in the vicinity of a public or private airport. The closest airport, San Luis Obispo County Regional Airport, is located approximately five miles to the south and there are no airstrips on campus. No impact would occur as a result of the proposed project.

g. Construction and operation of the proposed project would be subject to State Fire Marshall inspection and approval prior to operation, which would ensure appropriate emergency access is provided to and within the new facilities. Based on the locations of the proposed project components, construction and operation would not affect emergency access to existing campus facilities, agricultural areas, and the water treatment plant. Construction and operation of the project components would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocol in the event of a number of major disasters. Therefore, impacts would be less than significant.

h. The project site is located within an urban/wildland interface area, which includes agricultural fields, natural vegetation, and grasslands that constitute a moderate fire hazard. During construction, there is a potential fire risk due to use of equipment and increased human presence and activities that could ignite vegetation and result in a wildfire, resulting in a potentially significant impact. The proposed project would comply with the local fire code and as stated in response g) above, and State Fire Marshal inspection and approval would ensure adequate emergency access is provided under proposed project design. Moreover, the proposed project, in the context of the overall campus, would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocol in the event of a major fire. Based on compliance with existing regulations and mitigation identified below, potential impacts would be mitigated to less than significant.

Mitigation Measures

In addition to implementation of Mitigation Measures AQ-1 through AQ-8, included in Section III Air quality, the following measures are recommended to reduce impacts associated with hazards and hazardous materials.

HM-1 Prior to the commencement of construction activities associated with each phase of the proposed project, the contractor shall submit a site-specific spill response plan to the University for review and approval, which shall include the following elements:

a. General information including:

1. Name and location of the project; description of facility operations; construction manager and emergency coordinator names and phone numbers.

2. Description of what is stored at the facility (contents and volume).

3. Site diagram showing: hazardous materials storage areas; drains and culverts; surface waters and natural drainages; buildings; and surrounding land uses within 1,000 feet of the project site boundary.

b. A description of prevention measures to be taken at the project site, such as secondary containment, employee training, and proper storage. Products shall be kept in their original

containers with the original manufacturer's label and resealed when possible, and the manufacturer's recommendation for proper disposal shall be followed. The contractor shall perform routine inspections to ensure that all materials onsite are being stored and disposed of in an appropriate fashion.

c. Preparedness: A description of the planned onsite equipment for spill response and its location. Spill clean-up materials and equipment appropriate to the type and quantity of hazardous materials shall be located onsite and personnel made aware of their location. Key employees shall be trained in spill response procedures in accordance with local, State, and federal regulations. Material safety data sheets (MSDSs) shall be kept onsite during construction and operation of the project. Spill response materials including brooms, dust pans, mops, rags, gloves, absorbent pads/pillows/socks, sand/absorbent litter, sawdust, and plastic and metal containers will be kept onsite. The spill response plan shall also specify:

    1. The University's Hazardous Materials Management and Response Plan and spill response training.

    2. Local, state, and federal regulatory agency reporting procedures and phone numbers, as well as emergency response contractor contact information and local hospital contact information.

d. Response Procedures: An outline of emergency response procedures, including physical spill clean-up procedures, reporting requirements, and stabilization techniques. Spill guidelines shall include the following:

    1. All spills shall be immediately cleaned up upon discovery;

    2. The spill area shall be kept well ventilated and personnel shall wear the appropriate protective clothing to prevent injury when cleaning up a spill;

    3. Reportable quantities of spills of hazardous materials shall be reported to the appropriate local, state, and federal authorities.

    4. All vehicles leaking oil or fluids shall be scheduled for maintenance, and drip plans shall be placed under the leak when parked prior to the maintenance event.

    5. A list of contact information for the appropriate local, state, and federal authorities shall be located in the transformer oil and hazardous materials transportation vehicle(s) at all times. Transformer oil spills during transportation shall be immediately reported to the appropriate local, state, and federal authorities.

HM-2 If construction of the proposed project requires existing soils in the vicinity of the Crops Unit, the existing pesticide above-ground storage tank, or the former evaporation pond to be removed and/or disposed of off-site, the University shall collect a limited number of soil samples from the area(s) and test them for pesticides, herbicides, and heavy metals to determine if the soils require special handling and disposal methods.

HM-3 Prior to demolition of the Environmental Horticultural Unit buildings, the old OFC switch with the elevated PCBs should be removed and disposed of in accordance with all applicable rules and regulations.

HM-4 During the construction and operational phases of the project, if herbicides are used to manage vegetation onsite, the contractor or personnel applying herbicides shall comply with all state and local regulations regarding herbicide use. Herbicides shall be mixed and applied in conformance with the product manufacturer's directions. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets (MSDSs) for all hazardous materials to be used. To minimize harm to wildlife, livestock, vegetation, and waterbodies, products identified as non-toxic to birds, small mammals, and livestock shall be used, and herbicides shall not be applied within 60 feet of any surface waterbody when water is present. Herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. Herbicides shall not be applied when wind velocity exceeds 10 miles

per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.

HM-5 Prior to the commencement of construction activities associated with each phase of the proposed project, a State Fire Marshall-approved or Cal Fire-approved fire safety plan shall be prepared for use during construction and operation. The fire safety plan shall contain notification procedures and emergency fire precautions including, but not limited to, the following:

a. Identification of a water source for fire suppression, including onsite water storage for immediate use if necessary.

b. Maintained vegetation clearance including a 30-foot clearance around onsite building(s) and 10-foot clearance around all other onsite structures.

c. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.

d. Light trucks and cars with factory installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. Said vehicle types shall maintain their factory installed (type) muffler in good condition.

e. Fire rules shall be posted in an area visible to employees.

f. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.

g. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats.

h. Smoking shall be prohibited within the construction site.

Conclusion

Temporary risks associated with construction are addressed by mitigation in the Air Quality section, mitigation above, and current University practice, which includes requirements to maintain and implement spill response plans for all large construction projects and comply with the Fire Code. Based on compliance with existing regulations and implementation of identified mitigation measures, impacts associated with hazards and hazardous materials are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
IX. HYDROLOGY AND WATER QUALITY **Would the project:**				
a. Violate any water quality standards or waste discharge requirements?		X		
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?		X		

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?		X		
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?		X		
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
f. Otherwise substantially degrade water quality?			X	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j. Inundation by seiche, tsunami, or mudflow?				X

Background

The Phase 1, 2, and 3 project areas include portions of the Drumm Reservoir drainage in the east, Smith Reservoir and its drainage in the middle of the study area, and Shepard Reservoir and its drainage to the west. These reservoirs are federal waters subject to USACE jurisdiction; however, the reservoir drainages lack ordinary high water marks (OHWM). Due to the lack of OHWM, the reservoir drainages are not within USACE jurisdiction. All three reservoirs and their associated drainages support bed and bank features; therefore, they are state waters subject to CDFW and RWQCB jurisdictions (SWCA 2015). The state jurisdictional boundary is delineated by the extent of riparian vegetation and top-of-bank features; whereas, the jurisdictional boundaries of the federal waters are delineated by the outer extent of hydrophytic vegetation, hydric soils, and wetland hydrology. The Phase 4 project area is located immediately east of the Stenner Creek riparian corridor. Stenner Creek is a state and federal jurisdictional feature.

Discussion of Checklist Answers

a. As currently proposed, there are three locations where the proposed project could encroach on the jurisdictional areas and trigger the need for Clean Water Act and California Fish and Game Code permitting. The proposed southeastern detention basin in the Phase 1 area encroaches on the USACE jurisdictional wetlands and the surrounding CDFW jurisdictional riparian habitat of Smith Reservoir (refer to Figure 8). If the detention basin is constructed in the proposed location, the University would need to obtain Clean Water Act Section 401 and 404 authorizations and a Streambed Alteration Agreement from CDFW. The need for permits could be avoided by relocating the proposed detention basin to the northeast and outside of the jurisdictional boundaries. The proposed Phase 1 fill area that is

situated between Shepard and Smith reservoirs encroaches on the USACE jurisdictional wetlands of Shepard Reservoir. If the outer extent of the fill area is constructed in the proposed location, the University would need to obtain Clean Water Act Section 401 and 404 authorizations and a Streambed Alteration Agreement from CDFW. The need for this permitting can be avoided by ensuring that the proposed fill does not encroach on the jurisdictional boundaries of Shepard Reservoir. The proposed bridge crossing over the Drumm Reservoir drainage has the potential to impact the CDFW and RWQCB jurisdictions of the Drumm Reservoir Drainage. If the final design of the bridge crossing requires ground-disturbing activities within the banks of the drainage, installation of the bridge would require RWQCB and CDFW permitting.

The proposed project should be constructed in such a way that avoids impacts to these jurisdictional water features. Avoiding direct impacts to the communities would avoid the need to obtain permits from the regulatory agencies. Potential indirect impacts to these habitats and features include inadvertent disturbance by equipment, additional foot traffic, and discharge of sediment and other pollutants. Measures to avoid these direct and indirect impacts are provided below.

During construction and operation of the proposed project, gasoline, diesel fuel, lubricating oils, grease, and solvents could be used on-site. Accidental spills of these materials during construction activities could result in potentially significant water quality impacts. In addition, construction of the project would require ground disturbance, and soils loosened during excavation and grading could degrade water quality if mobilized and transported off-site via water flow. As grading and construction activities may occur during the rainy season or during a storm event, construction of the proposed project could result in adverse impacts to water quality. Because the project area would be greater than 1 acre, incorporation of a SWPPP and implementation of appropriate best management practices (BMPs) would be required during project construction as part of the project's General Construction Activity Stormwater Permit issued by the Regional Water Quality Control Board. The SWPPP identifies which structural and nonstructural BMPs will be implemented, such as sandbag barriers, temporary desilting basins, gravel access roads, dust controls, and construction worker training. In addition, Cal Poly has developed a *Water Quality Management Plan and a Storm Water Pollution Prevention Program* for development on campus (Cal Poly 2005). The Water Quality Management Plan outlines best management practices (BMPs) for construction and operation, which would be applicable to the project.

Operation of the project is not considered a substantive risk to water quality standards. The preparation and implementation of a SWPPP and compliance with the University's *Water Quality Management Plan and a Storm Water Pollution Prevention Program* will be sufficient to reduce risks of water quality standard violation. Compliance with existing regulations (i.e. preparation of a SWPPP) and identified mitigation would address these potential impacts (refer to Section III Air Quality, Section VI Geology and Soils, Section VIII Hazards and Hazardous Materials, and Section IX Hydrology and Water Quality). Therefore, potential impacts would be mitigated to less than significant.

b. The University is served by Whale Rock Reservoir via the City's treatment plant. The proposed project is expected to have a zero net increase in water demand across all project phases. Phase 1 would replace existing water fixtures with more efficient fixtures and would not increase the existing number of fixtures. Phase 2 would also replace existing water fixtures with more efficient fixtures and would reduce the number of water fixtures through the demolition of the existing greenhouse facilities. The fixtures to be removed through the demolition of the greenhouse facilities would be replaced with the same number of more efficient fixtures in the new greenhouse facilities proposed under Phase 4. Phase 3 would replace existing irrigated fields with the new Agricultural Event Center, which will be equipped with water efficient fixtures and is expected to result in less water consumption than the existing demand of the irrigated fields. The existing infrastructure that provides non-potable water to livestock watering troughs would be used to continue to support livestock operations and establish the new landscaping.

Construction of the new project components would result in an increase in impervious surfaces compared to existing conditions. Phase 1 of the project includes the construction of two detention basis that would be designed to collect stormwater runoff from pervious surfaces within the Phase 1 project area and facilitate percolation of the water back into the groundwater table. The Phase 2, 3, and 4 project

areas would also require the construction of new stormwater collection systems to facilitate groundwater recharge. The proposed project components would primarily be located on existing developed areas of campus and would include stormwater collection systems; therefore, implementation of the project would not substantially interfere with groundwater recharge. In addition, implementation of identified mitigation (refer to response to c., d., e. below) would require preparation and implementation of a drainage plan that would maximize groundwater recharge in a non-erosive manner.

c-e. The proposed project has been designed to avoid direct disturbance of existing drainages and swales proximate to the development area. In addition to compliance with an approved SWPPP, development and implementation of a site-specific drainage plan would be required to manage stormwater runoff from the impervious project areas. Mitigation, including performance standards, is identified below to ensure the project does not result in erosion or siltation on- or off-site.

Stormwater runoff generated by the project would not be discharged directly into existing drainages and culverts proximate to the project areas. Preparation and implementation of a drainage plan, as identified as mitigation below, would ensure that the project would not overburden existing culverts both proximate to the project areas.

f. The project will not otherwise substantially degrade water quality. The project contains no special uses which would pose a risk to water quality. Impacts are considered less than significant.

g-j. The project areas are not located within a 100-year flood hazard area, an area at risk from inundation by dam or levee failure, or within an area at risk of mudflow, tsunami or seiche. There is no impact.

Mitigation Measures

HYD-1 Prior to the commencement of construction activities associated with each phase of the proposed project, the University shall prepare a drainage plan and supportive hydrologic analysis demonstrating compliance with the following or equitable measures to maximize groundwater recharge and maintain existing rain event flow rates and patterns:

a. Off-site runoff shall not exceed existing flow rates during storm events.

b. If required to maintain the current flow rate, detention/retention basins shall be installed to reduce local increases in runoff, particularly on frequent runoff events (up to 10-year frequency).

c. If proposed, drainage discharge points shall include erosion protection and be designed such that flow hydraulics exiting the site mimics the natural condition as much as possible.

d. Drainage from impervious surfaces (e.g., roads, driveways, buildings) shall be directed to a common drainage basin.

e. Where feasible, grading and contouring shall be done in a way to direct surface runoff towards the above-referenced basins (and/or closed depressions).

HYD-2 Prior to the commencement of construction activities associated with each phase of the proposed project, drainage control and erosion control Best Management Practices (BMPs) shall be shown on all applicable construction plans. During construction, all grading activities shall occur during the dry season months, which are typically May through October. Alternatively, a settling pond shall be installed on the construction site with sufficient capacity to contain expected runoff during a rainfall event and located to be able to catch all runoff from the 'active' area. If construction occurs during wet season months, which are typically November through April, all construction activities shall cease during rainfall events when rutting occurs across greater than 10 percent of a road or when rills more than 10 feet in length develop and lead off the road surface in the work area. The construction manager/contractor shall be responsible for suspending construction activities until the rainfall event has ceased and repairs to the rutting and/or rilling damage have been implemented. Approved drainage control and erosion control BMPs shall be in place prior to the typical wet season months (November 1).

HYD-3 Prior to the commencement of construction activities associated with each phase of the proposed project, a Sedimentation and Erosion Control Plan shall be prepared as a supplement to the project's required SWPPP to minimize potential downstream sedimentation. This Plan shall minimize the potential for project sediment to leave the project site and its components shall be incorporated into all applicable construction plans. During construction, at a minimum, straw wattles (or comparably effective devices [as determined by the onsite Civil Engineer, in consultation with the University]) shall be placed on the downslope sides of the proposed work which would direct flows into temporary sedimentation basins. This shall be checked and maintained regularly and after all larger storm events. All remedial work shall be done immediately after discovery so sedimentation control devices remain in good working order during the entire construction phase.

HYD-4 Prior to the commencement of construction activities associated with each phase of the proposed project, the construction manager/contractor shall identify the location of all fuels and hazardous materials storage areas on construction plans. Storage of fuels and hazardous materials shall be prohibited within 200 feet of surface water features, drainage swales, actively farmed agricultural areas, and private groundwater supply wells, and within 400 feet of community or municipal groundwater supply wells (if it is determined that such wells exist on or in close proximity to the project site).

HYD-5 During ground-disturbing activities, construction, and operation, all vehicles and equipment, including all hydraulic hoses, shall be maintained in good working order so that they are free of any and all leaks that could escape the vehicle or contact the ground, and to ensure that any leaks or spills during maintenance or storage can be easily and properly removed.

Conclusion

The project will be designed to comply with currently applicable codes, and the project will be required to have an SWPPP prepared, approved and implemented. The project areas are not subject to special hydrologic hazards. Impacts associated with hydrology and water quality would be mitigated to less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
X. LAND USE AND PLANNING **Would the project:**				
a. Physically divide an established community?				X
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion of Checklist Answers

a. The project areas are located within the extended campus, and would not physically divide an established community. There is no impact.

b. The project areas are located within the extended campus in the Master Plan. The project areas are designated for "Outdoor Teaching and Learning" land uses (Land Use, San Luis Creek Watershed, Exhibit 5.1). The Outdoor Teaching and Learning element identifies the variety of "living laboratories" provided on the University campus (e.g., agricultural fields and units, ecological study areas, and design village), which are central to Cal Poly's mission and must remain integrated with the campus. The Phase 1 project area is part of the Equine Center and is developed with existing facilities; the Phase 2 project area is part of the Environmental Horticultural Science Unit and is developed with existing facilities; the Phase 3 project area is part of the Beef Unit and is developed with existing facilities; and the Phase 4 project area is part of the Crops Unit and is developed with existing facilities.

The proposed project was not specifically identified in the Master Plan; however, one project component, the Agricultural Pavilion Area associated with Phase 3, is included on the Master Plan campus development map. The Master Plan describes the new agriculture pavilion as a multi-purpose agriculture pavilion within walking distance of the campus core on the site currently occupied by the old Beef Unit, Livestock Pavilion and Herdsman Hall, intended to replace the existing functions of these facilities. Land use impacts associated with the new agriculture pavilion were considered less than significant (Class III).

Consistent with the Master Plan, the proposed project components would be consistent with the "Outdoor Teaching and Learning" land use designation and would support existing developed campus facilities and uses. Implementation of Phases 1, 2, and 3 of the project would avoid prime agricultural land and would incorporate mitigation measures intended to avoid or minimize potentially significant impacts associated with development of the project components. Phase 4 of the project would include the construction of a new greenhouse facility on prime agricultural land. The proposed greenhouse facility is considered an agricultural activity under the "Farmsteads, Instructional and Research Units" agricultural activity category in the Master Plan; as such, implementation of Phase 4 would not convert prime agricultural land to a nonagricultural use. Therefore, implementation of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

c. There are no HCPs or NCCPs which cover the project areas. There is no impact.

Mitigation Measures

No additional mitigation required.

Conclusion

There would be no adverse land use planning impacts as a result of the project.

Issues	Potentially Significant New or Increased Impact	Less than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XI. MINERAL RESOURCES				
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion of Checklist Answers

a-b. There are no known mineral resources located within the project site. There is no impact.

Mitigation Measures

None required.

Conclusion

There would be no impact to mineral resources as a result of the project.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XII. NOISE				
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Background

The existing ambient noise environment in the Phases 1, 2, and 3 project areas includes low density roadway traffic along Via Carta and Village Drive, and operational activities associated with the Equine Center and Environmental Horticultural Science Unit. The closest sensitive receptors to the Phases 1, 2, and 3 project areas include the residents at the Poly Canyon Village complex, located approximately 200 or more feet east from the nearest proposed project components. The existing ambient noise environment in the Phase 4 project area includes roadway traffic on Mt. Bishop Road, Highland Drive, West Creek Road, and the railroad tracks located approximately 400 feet east of the Phase 4 project area. Based on the County of San Luis Obispo Noise Element (San Luis Obispo County 1992), the 50 to 65 decibel (db) noise contour associated with the railroad extends over the eastern half of the Phase 4 project area. Additional sources of noise in the area include agricultural activities in the area. There are no sensitive receptors within 500 feet of the Phase 4 project area.

Discussion of Checklist Answers

a, c, d. In assessing community noise (Ldn or CNEL), the existing Cal Poly Master Plan and Final EIR (2001) identifies long-term increases in noise levels of greater than 3 dBA as perceptible and constituting a significant impact, while changes of less than 3 dBA are generally not discernible to local residents or sensitive land uses. The existing Cal Poly Master Plan and Final EIR (2001) also states that noise associated with the occupancy and operation of most facilities proposed in the Master Plan are considered negligible, and well below thresholds of significance adopted by either the City or County of San Luis Obispo.

The City and County of San Luis Obispo's General Plan Noise Elements establish operational standards for siting of new land uses and establish noise performance standards for non-transportation noise sources in the city and county; however, Cal Poly is not subject to City or County noise standards and, based on the noise measurement surveys conducted for this project, ambient noise levels in areas adjacent to the project site within the City of San Luis Obispo currently exceed the City's noise standards.

Possible increases in existing noise levels would be associated with certain aspects of the proposed project, including the introduction of a new agricultural event center to a currently undeveloped area on campus and temporary construction noise impacts associated with demolition and construction activities proposed in each project phase. The proposed project components would be located in the extended campus, outside of the central campus core, and no sensitive receptors are located within close proximity to the proposed project areas. Additionally, proposed project uses would resemble existing academic uses located in the project vicinity, and would not be considered a substantially noisier use than other academic structures or program-related uses on campus. Moreover, on-site uses are not expected to exceed established noise standards for the area. Impacts would be less than significant. The project will generate both construction-related and operational noise. Each is addressed in the following paragraphs.

Construction-related Noise. Construction-related noise is a short-term, periodic, and temporary impact of the project. Earthmoving, materials handling, stationary equipment, and construction vehicles generate noise during clearing, excavation, grading, structure, and utility construction. Typical construction equipment noise levels are provided in Table 9. Actual noise levels at receiving site such as residences will vary based on the type and volume of equipment present and operating on the site at any one time. During construction activity, noise would potentially impact or annoy sensitive land uses, including: the Poly Canyon residences east of the Phase 2 project area, and faculty, staff, and students participating in outdoor learning activities.

Table 9. Typical Construction Equipment Noise Levels

Type of Equipment	Maximum Level, dB (50 ft)
Scrapers	88
Bulldozers	87
Backhoe	85
Pneumatic Tools	85

Source: Student Housing South EIR 2014

Construction noise will be temporary, restricted to daylight hours, and further conditioned by distances between the project site and noise sensitive receptors and the application of Master Plan mitigation identified below. The project is not expected to require pile drivers, or other atypical equipment, which would increase potential for vibration or noise above typical levels. Construction-related trips would contribute to transportation-related noise along the surrounding road network; however, the increase would be less than 1% of the current average daily traffic, and would therefore not result in a noticeable change in transportation-related noise levels. To ensure construction noise impacts are reduced to a level that is less than significant, mitigation is provided in accordance with the *Cal Poly Master Plan and Final*

EIR (Cal Poly 2001). Therefore, impacts associated with construction noise are considered less than significant with mitigation.

Operation-related Noise. The new project components proposed under Phases 1 and 2 are intended to upgrade and enhance existing land uses in the Equine Center and Environmental Horticultural Science Units on campus. Similarly, the project components proposed under Phase 4, the new greenhouse and farm store facilities, would replace the greenhouse structures proposed to be demolished under Phase 2 of the project and would mostly consist of modernizing and upgrading existing uses that already occur on campus. Accordingly, improving these facilities is not expected to generate increased or new uses of the existing facilities or project areas and is not expected to generate substantial levels of new operational noise.

The Agricultural Event Center proposed under Phase 3 of the proposed project is expected to hold approximately 30 special agricultural events per year, predominately occurring during the regular school year. Up to 1,500 people would be accommodated per event, including students, staff and off-campus community visitors. The 30 special events would be regular and recurring, and could potentially occur three times per month during the school year. Operation of this facility would generate increased noise from traffic travelling on adjacent streets, as well as noise associated with the special events. The Agricultural Event Center would be fully-enclosed and is not expected to generate substantial noise outside of the building as all events would be held indoors. The Agricultural Event Center would be located approximately 700 feet west of the nearest Poly Canyon residence. Based on the design of the proposed facility, as well as the distance between the proposed facility and noise sensitive uses, any increase in noise levels during operation would be less than significant.

b. The proposed project would not result in the installation of any stationary equipment or long-term operational activities that would generate ground vibration. As a result, ground-vibration impacts associated with the proposed project would be limited to short-term construction activities. As previously noted, the nearest residential land uses are located approximately 400 feet east of the Phase 2 project area, within the Poly Canyon residential complex. Predicted vibration levels at these nearest offsite structures would not exceed the minimum recommended criteria for structural damage or human annoyance. As a result, this impact would be considered less than significant.

e-f. The project site is not within an airport land use plan area or within 2 miles of a public or private airport. No impact would occur.

Mitigation Measures

To ensure construction noise impacts are reduced to a level that is less than significant, the following mitigation measure is provided in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001):

N-1: Cal Poly shall apply the following during construction:

Cal Poly Standard Requirements

A) The requirements of the Article are in addition to those of Article 4.02 of the Contract General Conditions.

B) Maximum noise levels within 1,000 feet of any classroom, laboratory, residence, business, adjacent buildings, or other populated area; noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet.

C) Equipment: equip jackhammers with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a "whisperized" compressor. Compressor hoods shall be closed while equipment is in operation. Use electrically powered rather than gasoline or diesel powered forklifts. Provide portable noise barriers around jack hammering, and barriers constructed of 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.

D) Operations: keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have properly functioning mufflers.

E) Scheduling: schedule noisy operations so as to minimize their duration at any given location, and to minimize disruption to the adjoining users. Notify the Trustees and the Architect in advance of performing work creating unusual noise and schedule such work at times mutually agreeable.

F) Do not play radios, tape recorders, televisions, and other similar items at construction site.

G) When work occurs in or near occupied buildings, the Contractor is cautioned to keep noise associated with any activities to a minimum. If excessively noisy operations that disrupt academic activities are anticipated, they must be scheduled after normal work hours.

H) All work in the area of the residence halls will be restricted to 10:00 a.m. to 10:00 p.m., seven days per week, throughout the year. No work will be allowed in the residence hall areas during the finals week. University reserves the right to stop construction work, including but not limited to noisy work, during the following events: Spring and Winter Commencement, Open House, Finals Week, residence hall move-in, or at other times that may be identified by the University. University reserves the right to stop noisy work at any time when said work disrupts classes or other planned events.

Conclusion

Impacts associated with noise are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XIII. POPULATION AND HOUSING				
Would the project result in:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

Discussion of Checklist Answers

a. The project will serve an existing student population, and will not result in extension of infrastructure to new locations. The project will not, therefore, induce population growth. Impacts are considered less than significant.

b-c. Phase 2 of the proposed project includes the demolition of Building 048-A EHS Residence within the Environmental Horticultural Science Unit. This residential building supports up to five temporary student residents during the academic school year. Alternative housing options are available on campus for students displaced by the removal of this residential structure. Implementation of the proposed project and removal of this residential structure would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere; therefore, impacts would be less than significant.

Mitigation Measures

None required.

Conclusion

Impacts to population and housing are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XIV. PUBLIC SERVICES				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?				X
iv. Parks?				X
v. Other Public Facilities?				X

Discussion of Checklist Answers

a-i. The campus is served by the California Department of Forestry and Fire Protection (CAL FIRE) for emergency response and fire suppression. The project would be designed to meet or exceed applicable fire code requirements, including preparation and implementation of a Fire Safety Plan. Impacts are considered less than significant.

a-ii. The campus is served by University police. The University police may call upon City and County of San Luis Obispo law enforcement for backup as needed. The project would not alter enrollment; therefore, the total population served by University police would be unchanged. No new or physically altered police facilities are anticipated as a result of this project; therefore, no environmental impacts associated with construction of new facilities are expected. Impacts are considered less than significant.

a-iii. The project would not increase populations of school-age children, or otherwise increase potential demand for school facilities. There is no impact.

a-iv. The project would not increase student enrollment or population in the city, necessitating additional park space. There is no impact.

a-v. The project would not adversely impact other governmental facilities such as libraries or government functions. There is no impact.

Mitigation Measures

None required.

Conclusion

Impacts to public services are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XV. RECREATION				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion of Checklist Answers

a-b. Existing athletic, recreational, and open space areas are provided on campus for use by students and the campus community. The project would not generate additional demand for recreational facilities, and would not increase use of city parks or recreational facilities or result in substantial physical deterioration of city facilities. The project would not result in construction of recreational facilities which may adversely affect the environment. The project would not increase enrollment and therefore would not result in additional impacts to existing campus recreational facilities. Impacts would be less than significant.

Mitigation Measures

None required.

Conclusion

Impacts to recreation are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XVI. TRANSPORTATION/TRAFFIC				
Would the project:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		X		
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e. Result in inadequate emergency access?			X	
f. Result in inadequate parking capacity?			X	
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

Background/Regulatory Setting

The project would add traffic to transportation facilities operated by the CSU system, California Department of Transportation (Caltrans), and the City of San Luis Obispo. Excerpted standards relevant to the proposed project and study locations are summarized below.

California State University. The CSU *Transportation Impact Study Manual* provides guidance to help determine when a Transportation Impact Study (TIS) is required. This determination is based on responses to the transportation/traffic checklist questions included in Appendix G of the CEQA Guidelines. No specific trip generation threshold is provided which would require a TIS. Instead the need for a TIS is determined based on conflicts with applicable plans, ordinances, programs or policies related to transportation.

City of San Luis Obispo. The City's *Multimodal Transportation Impact Study Guidelines* define when a TIS is required. Among other criteria, any project that would generate more than 100 peak hour automobile trips on City streets would have to prepare a TIS. The peak hour of travel in 2016 on Santa Rosa Street between the City Limit and Highland Drive is from 3:30-4:30 PM, with a two-way hourly volume of 2,636 vehicles. The two-way volume on this segment between 5:30-6:30 PM is 1,886 vehicles, or 72 percent of the peak hour volume.

Caltrans. The Caltrans *Guide for the Preparation of Traffic Impact Studies* provides guidance in determining if and when a TIS is needed. Among other criteria, when a project generates over 100 peak hour trips assigned to a State highway facility (such as State Route 1 at Highland Drive) a traffic study may be required.

The information in this section is based on the Trip Generation Memorandum prepared in support of the proposed project and included as Appendix F (Central Coast Transportation Consulting [CCTC] 2017).

Discussion of Checklist Answers

a, b. The Phases 1, 2, and 3 project areas are located in the northern portion of the extended campus and are accessed via Village Drive, Via Carta, and unpaved access roads and driveways. The Phase 4 project area is accessed via Mt. Bishop Road, Highland Drive, and West Creek Road.

Construction-related Traffic. Project construction would add trips to campus and City roadways in the project vicinity through the duration of construction activities, including haul trips, worker trips, material delivery trips, and heavy equipment trips. This minimal level of trip generation would not have an adverse effect on traffic operations or increase congestion on area roadways in the long-term. Therefore, potential impacts related to construction would be less than significant.

Operational Traffic. The proposed project components do not conform to typical land uses with data in the Institute of Transportation Engineers' *Trip Generation Manual*. Trip generation for the project was developed in consultation with the project team and University staff, using information contained in the project description to determine the frequency, size and duration of events. The number of trips generated by a typical event was estimated using this information and in consideration of other available data related to travel behavior such as typical vehicle occupancy, transit availability, and travel demand management programs already in place. These operational characteristics of such events are described below.

The new project components proposed under Phases 1 and 2 are intended to upgrade and enhance existing land uses in the Equine Center and Environmental Horticultural Science Units on campus. Similarly, the project components proposed under Phase 4, the new greenhouse and farm store facilities, would replace the greenhouse structures proposed to be demolished under Phase 2 of the project and would mostly consist of modernizing and upgrading existing uses that already occur on campus. Accordingly, improving these facilities is expected to generate insubstantial levels of new traffic. In addition, no signalized intersections that would be primarily affected by the project were identified on the Cal Poly campus. The nearest signalized intersection likely affected by the proposed project is the intersection of Highland Drive and Santa Rosa Street. Based on traffic analysis recently prepared for the Student Housing South project, this intersection is projected to operate at LOS D, or better, under near-term and future operational conditions (Cal Poly 2013). Therefore, the proposed project would not be anticipated to result in or contribute to unacceptable levels of service (i.e., LOS E or F) at primarily affected signalized intersections.

The Agricultural Event Center proposed under Phase 3 of the proposed project is expected to hold approximately 30 special agricultural events per year, predominately occurring during the regular school year. The events are proposed as follows:

- Fifteen weekend events will serve up to 750 attendees;
- Five weekday events starting after 6:00 PM will serve up to 1,000 attendees;
- Five weekday events starting after 6:00 PM will serve up to 1,500 attendees; and,
- Five campus-centric events (90 percent of attendees from on-campus locations) serving up to 1,000 attendees.

The largest events will serve up to 1,500 attendees up to five times per year. Because they will start after 6:00 PM, they will avoid the peak hour of travel on State Route 1/Santa Rosa Street, which occurs from 3:30-4:30 PM. The following assumptions were made to estimate trip generation for these largest events:

- Ten percent of the attendees will arrive and depart outside of the peak hour of the event.
- Ten percent of the attendees will be students living on campus who will not make a vehicle trip affecting off-campus roadways.
- Attendees will arrive by private vehicle with an average vehicle occupancy of 2.5 persons per vehicle.

Table 10 summarizes the trip generation based on these assumptions.

Table 10. Vehicular Trip Generation Estimates

Project Component	Size	Daily Trips	Maximum Hourly Trips					
			Event Start			Event End		
			In	Out	Total	In	Out	Total
Special Events[1]	1,500 attendees	1,080	480	0	480	0	480	480

[1] Special Events traffic assumed to have an average vehicle ridership of 2.5, per County Resolution 2008-152. 90% of attendees were assumed to arrive from off campus locations and enter within one hour and exit in one different hour.
Source: CCTC 2017

As shown in Table 10, a 1,500-person event would generate up to 480 trips during a single hour using the assumptions described above. These trips would occur outside of the peak hour of travel for adjacent streets, and would occur infrequently. As described in the project description, the proposed project includes the preparation and implementation of a Travel Demand Management (TDM) Plan to ensure operational traffic associated with the recurring special events does not exceed 100 trips during the peak hour of adjacent streets. The TDM Plan shall be prepared prior to, and implemented during, operation of Phase 3. The TDM plan may include, but is not limited to, the following measures:

- Implement shuttle/transit service from off campus locations during special events. Likely pickup locations include hotels associated with the event, the downtown transit center, and on-campus housing complexes.
- Schedule arrivals/departures for exhibitors and participants with large vehicles and trailers to occur well before the event starts/ends and outside of the peak hour of adjacent streets to spread the event trips over a longer period of time and minimize the impacts of vehicles with trailers.
- Implement manual traffic control at on-campus intersections and signage directing attendees and participants to the appropriate parking and staging areas.
- Coordinate with Caltrans and the City of San Luis Obispo to schedule event start and end times outside of the peak travel periods on adjacent streets.
- Ensure special events do not occur simultaneously with other large events on campus, such as sporting events or cultural events at the Performing Arts Center.
- Inform event participants and attendees of shuttle service availability, parking, and other aspects of the TDM plan.
- Monitor and adjust the TDM plan following the initial events to effectively manage the transportation demand.

Implementation of proposed TDM plan would provide travel options to attendees as well as minimize the number of vehicle trips associated with special events at the Agricultural Event Center and would ensure operational traffic associated with the recurring special events does not exceed 100 trips during the peak hour of adjacent streets. Therefore, impacts would be less than significant.

c. The project would not alter air traffic patterns or increase air traffic levels. Proposed development would not pose a risk to regional air traffic. No impact would occur.

d. The project does not include any design features that may result in a hazard; the new facilities would continue to be accessed similar to existing conditions. No substantial change in roadway design or site access would occur that would create hazards or incompatible uses. Therefore, potential impacts would be less than significant.

e. Construction and operation of the proposed project would be subject to State Fire Marshall inspection and approval prior to operation, which would ensure appropriate emergency access is provided to and within the facility. Emergency responders would access the project site via Highway 1, and internal emergency access would be provided within the facility itself, based on review and approval by the State Fire Marshall. Therefore, potential impacts would be less than significant.

f. The project would provide temporary parking and staging areas for construction personnel within the project areas. During operation, the new project components proposed under Phases 1, 2, and 4 are not expected to result in a new use or increased demand for parking compared to existing conditions. Operation of the new Agricultural Event Center would utilize existing campus parking areas, primarily the large surface parking lots immediately south and west of the proposed event center, adjacent to Via Carta. These existing parking facilities are anticipated to be sufficient to accommodate increased parking demand associated with operation of the Agricultural Events Center. The project is not expected to necessitate the construction of additional parking facilities. Therefore, potential impacts would be less than significant.

g. Based on the nature and location of the project, it would not conflict with any adopted policies, plans, or programs supporting alternative transportation. Therefore, no impact would occur.

Mitigation Measures

The following mitigation measure from the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001) applies to the project:

TR-1 Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.

Conclusion

Potential transportation and traffic impacts associated with construction activities would be short-term and limited. Operational trips associated with Phases 1, 2, and 4 would be generally consistent with existing conditions and would not measurably contribute to congestion. Operational trips associated with special events held at the new Agricultural Event Center under Phase 3 are expected to be less than significant as proposed and would be further reduced with implementation of the proposed TDM plan. Therefore, impacts associated with transportation and traffic are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XVII. TRIBAL CULTURAL RESOURCES				
Would the project:				
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or		X		

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Discussion of Checklist Answers

a. As discussed above under Section V. Cultural Resources, eleven historic-period architectural resources (i.e., resources that are 50 years of age or older) are located within the project study areas and are listed in Table 6 below. An Architectural Resource Evaluation Report was prepared in support of the proposed project to evaluate the significance of the historic-period structures and is included in Appendix D (Carr 2017). All eleven of the historic-period architectural resources in the project areas were constructed during Julian A. McPhee's 33-year tenure as President, between 1933-1966. Based on the research conducted and the December 7 site visit, of these, only the Mare Barn (032-O), constructed in 1940, meets the eligibility criteria for listing in the California Register of Historical Resources. Building No. 032C - the Equine Center Mare Barn, meets one of the four criteria for listing in the California Register of Historical Resources and therefore constitutes a historical resource for the purpose of CEQA. The Mare Barn, constructed in 1940, is eligible under Criterion 1: "Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States".

Based on the current Phase 1 project plans, the Mare Barn structure (Building 032-O) is located within the Phase 1 disturbance boundary and is proposed to be demolished. The project could cause a substantial adverse change in the significance of a historical resource as defined in §15064.5; however, implementation of Mitigation Measure CR-1 would reduce potential impacts to be less than significant in accordance with the Secretary of the Interior's standards for preservation. Therefore, this impact is considered potentially significant but mitigable.

b. A search of the Sacred Lands File was performed for the project area by the Native American Heritage Commission with negative results. The University will comply with Public Resources Code Sections 21080.3.1 and 21080.3.2, which require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. As discussed above under Section V. Cultural Resources, a previously identified prehistoric archaeological site, CA-SLO-2280, is located within the Phase 2 project area. The site consists of a marine shell and flaked stone scatter located within a landscaped garden area. At the time of its original documentation, site constituents included multiple varieties marine shell and a Monterey chert biface. The site is located in a developed area and has been subject to extensive historic and modern disturbance from the original construction of the Ornamental Horticultural Unit and associated landscaping. The cultural deposit is situated in a secondary context and does not appear to retain integrity. Prehistoric site CA-SLO-2280 has not been evaluated for the California Register of Historical Places. Given the conceptual nature of the proposed project, specific project-related impacts to CA-SLO-2280 associated with proposed ground-disturbing activities and final site design that may occur during project implementation are unknown at this time. If possible, physical disturbance within the identified CA-SLO-2280 site boundary should be avoided. Additionally, archaeological monitoring shall occur during ground disturbing activities to avoid potential impacts to CA-SLO-2280. No other resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant

pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 are known to occur within the project areas. Therefore, impacts are expected to be less than significant with implementation of Mitigation Measures CR-2 through CR-7.

Mitigation Measures

Implement Mitigation Measures CR-1 through CR-7.

Conclusion

Implementation of the proposed mitigation measures, including documentation and preservation of distinctive features associated with the Mare Barn (Building 032-O), and avoidance and monitoring to ensure no impacts to CA-SLO-2280 will occur during project implementation, will reduce potential impacts to be less than significant. Therefore, potential impacts would be mitigated to less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XVIII. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could have significant environmental effects?			X	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements necessary?			X	
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion of Checklist Answers

a., b, e. The proposed project does not include new wastewater treatment facilities or new connection to any existing sewer system. Implementation of the proposed project could result in the generation of increased quantities of wastewater associated with the development of new restroom facilities in the new Agricultural Event Center. The City of San Luis Obispo provides wastewater collection and treatment services to the University through a contractual agreement. Consequently, Cal Poly owns an equity share of the City's sewer collection and treatment infrastructure. The entire campus ties into a sewer main

located near the intersection of California Street and Foothill Boulevard. The City meters wastewater flows and charges the University accordingly.

The Cal Poly sanitary sewer system was built as part of the original campus infrastructure and has been in service for over 100 years. Partly due to the rolling terrain of the campus and surrounding community there are numerous sewer lift stations, many of them in the outlaying agricultural areas. Ongoing conservation efforts, such as installation of ultra-low flow plumbing fixtures, have resulted in significant reductions in sewer volumes despite of campus growth. In addition, the City and the University are exploring the potential for using partially-treated grey water for irrigation. . A summary of wastewater flow data collected from on-campus flow meters during the years of 2013 through 2016 is provided in Table 11 below.

Table 11. Wastewater (Sewer) Flow Monitoring Results: October – November 2016

Total Wastewater (Sewer) Flow	2013 (HCF)	2014 (HCF)	2015 (HCF)	2016 (HCF) cv
January	12,305	12,681	11,426	13,136
February	*13,288*	13,549	*11,012*	*11,393*
March	13,556	11,420	9,158	9,994
April	13,565	14,379	11,813	11,367
May	16,213	15,420	11,178	11,985
June	4,977	7,540	5,473	4,993
July	2,081	2,015	1,936	1,334
August	2,637	1,587	1,451	1,820
September	4,413	6,966	6,807	5,091
October	16,244	14,301	11,716	11,374
November	11,897	10,757	9,608	9,430
December	6,064	6,613	4,932	7,875

HCF = Hundred cubic feet
Source: Cal Poly 2016.

As shown in Table 11, quantities of sewer wastewater generated on-campus fluctuate throughout the year, demonstrating substantial reductions between June and September and during December, when students are typically on vacation. Additionally, as shown in Table 11, quantities of wastewater generated by Cal Poly have reduced over time, despite an increasing population.

The City owns and operates a Water Resource Recovery Facility (WRRF) located at 35 Prado Road, San Luis Obispo, approximately 3.5 miles south from the University. The WRRF manages and treats wastewater in accordance with the standards of the State Water Resources Control Board (SWRCB) to remove solids, reduce the amount of nutrients, and eliminate bacteria in the treated wastewater before it is discharged to San Luis Obispo Creek. The wastewater collection system is comprised of over 138 miles of main line, 9 lift stations, and various other assets. The collections team maintains and upgrades this system along with the city's stormwater collections system. The City's WRRF is responsible for treating all of the wastewater (sewage) within the City, Cal Poly and the County airport. The facility treats 4.5 million gallons of wastewater daily, twenty four hours a day, 365 days per year. Staffing of operators, laboratory analysts and maintenance technicians ensure the WRRF is operated and maintained in the most efficient manner possible and complies with federal state and local discharge requirements (City of San Luis Obispo Utilities Department 2017).

The most recent upgrade to the WRF was completed to improve the quality of water discharged into San Luis Obispo Creek. The WRRF has very stringent discharge requirements and now produces a high quality effluent that surpasses drinking water standards for many constituents. Plans to utilize a portion of this effluent to irrigate parks, median strips, landscape and other appropriate uses are being implemented under the City's Water Reuse Program. The existing plant capacity is 5.1 million gallons per day (mgd). The total city-wide flow averages approximately 3.0-3.5 mgd during the dry season and droughts, and up to 20 mgd during the rainy season. Cal Poly is allotted 475,000 gpd per its capital share of the facility and is currently averaging flows at 206,000 gpd, less than half of its allotted capacity. The City is currently planning another upgrade to its facility that would increase the plant capacity from 5.1 mgd to 5.4 mgd. Construction on the upgrade is anticipated to commence in 2018 (Hix, D., City Deputy Director of Wastewater, pers. comm. 2017). Based on Cal Poly's available allotment in the City's WRRF, a limited, potentially sporadic increase in wastewater generation associated with special events at the new Agricultural Event Center, are not anticipated to exceed existing capacity limits. ~~;~~ ~~t~~Therefore, impacts are considered less than significant.

c. Aside from onsite stormwater management, the project would not require or result in the construction of new stormwater drainage facilities. Therefore, impacts are considered less than significant.

d. The University's water is derived from three primary sources: Whale Rock Reservoir, Salinas Reservoir (also called Santa Margarita Lake), and local groundwater. Water from the two reservoirs is delivered by the City of San Luis Obispo; local groundwater is provided via six agricultural wells owned and operated by the University. Cal Poly has water rights for both groundwater and surface water. Groundwater is pumped from six agricultural wells located on University land and is limited by relatively shallow, low capacity aquifers, especially during drought years. By State Water Resources Control Board permit, Cal Poly owns surface water rights to Brizzolara Creek on the Cal Poly campus, and to Old Creek which supplies Whale Rock Reservoir near Cayucos.

Along with the City of San Luis Obispo and the California Men's Colony, Cal Poly was one of the original developers of the Whale Rock Reservoir, and therefore retains rights to 34 percent of the reservoir capacity. Since Cal Poly owns adequate water rights to meet campus needs, the University does not pay for its water supply, but does pay fees to the City of San Luis Obispo for delivery and treatment. By investing capital funds to purchase a capacity share of the City water treatment plant, Cal Poly receives a discounted rate for treatment costs. Surface water is delivered by the City of San Luis Obispo from both Whale Rock Reservoir and Salinas Reservoir. The City of San Luis Obispo operates Whale Rock Reservoir and determines the most economical way to deliver both treated water for domestic consumption and raw (untreated) water for agricultural use. Whale Rock water is generally used for domestic use. Untreated Salinas water is generally delivered to Cal Poly for agricultural use. Both types of delivered water are applied against Cal Poly's Whale Rock water rights.

Cal Poly has aggressively pursued water conservation through water efficient new construction, retrofit of existing buildings with ultra-low flow plumbing fixtures, installation of drip irrigation and irrigation controls, and use of native and drought tolerant plantings. These efforts have resulted in water usage rates that have dropped or remained flat since 1997, in spite of significant campus building growth over the same period. In 2015, Cal Poly adopted a Drought Response Plan in response to the Governor's Executive Order to state agencies to reduce water usage by 25 percent by February 2016. The campus was successful in implementing immediate measures including additional low flow fixtures, replaced kitchen equipment, reduction of watering to campus sports fields and landscaping, and major improvements to agricultural irrigation systems. While water reduction efforts are ongoing across campus, the projects that have been implemented as of December 2015 have already resulted in a reduction to all water uses by 31%, surpassing the Governor's 25% potable water use reduction mandate. This effort has saved 141,419,521 gallons and has generating over $500,000 in water and sewer utility costs savings compared to the 2013 baseline.

~~The Cal Poly sanitary sewer system was built as part of the original campus infrastructure and has been in service for over 100 years. Partly due to the rolling terrain of the campus and surrounding community there are numerous sewer lift stations, many of them in the outlaying agricultural areas. All waste water from the Cal Poly campus is discharged to the City of San Luis Obispo's sewer collection and treatment~~

~~system. Cal Poly, in partnership with the City of SLO, has invested capital funds to purchase a capacity share of the City's waste water treatment plant, and therefore receives a discounted rate for waste water. Ongoing conservation efforts, such as installation of ultra-low flow plumbing fixtures, have resulted in significant reductions in sewer volumes despite of campus growth. In addition, the City and the University are exploring the potential for using partially-treated grey water for irrigation. .~~ The proposed project would require construction water, including landscaping irrigation until plantings are established. Operation of the proposed project is expected to have a zero net increase in potable water demand across all project phases. Operational demands would be met by existing water supply facilities at the project site. Increases in domestic water demand at Cal Poly are typically correlated with increases in the number of full-time-equivalent (FTE) students enrolled at Cal Poly. Implementation of the proposed project would not contribute to increased enrollment and is therefore, not expected to result in a significant increase in demand for domestic water supply.

While the proposed project would include the development of 317,607 square feet of new construction, not all of the new buildings and facilities would require potable and/or non-potable water. For example, none of the project components proposed under Phase 1 of the proposed project would require new or increased potable or non-potable water demand. Only two project components proposed under Phase 2 of the proposed project, the Equestrian Pavilion and the Animal Health Center, may require new potable and/or non-potable water; however, these facilities would be developed with water-conserving fixtures and would be used primarily during the academic year. New water demand would be required for any new restroom facilities associated with final design and, particularly for the Agricultural Event Center, would be used sporadically throughout the academic year, primarily associated with proposed special events. Under Phase 3, the new Agricultural Event Center would require new potable and non-potable water demand. The new Herdsman Hall would replace the existing Herdsman Hall and is therefore not anticipated to result in a new or increased demand for potable or non-potable water. By replacing the existing facility with a new facility equipped with water conserving fixtures, the new facility may require less water than the existing facility. Under Phase 4 of the proposed project, the new greenhouse facility would require new non-potable water; however, the new 60,000 sf greenhouse facility would be developed with water-conserving fixtures and would replace approximately 62,582 sf of greenhouse, lab, and storage facilities proposed to be demolished under Phase 2. ~~Phase 1 would replace existing water fixtures with more efficient fixtures and would not increase the existing number of fixtures. Phase 2 would also replace existing water fixtures with more efficient fixtures and would reduce the number of water fixtures through the demolition of the existing greenhouse facilities. The fixtures to be removed through the demolition of the greenhouse facilities would be replaced with the same number of more efficient fixtures in the new greenhouse facilities proposed under Phase 4. Phase 3 would replace existing irrigated fields with the new Agricultural Event Center, which will be equipped with water efficient fixtures and is expected to result in less water consumption than the existing demand of the irrigated fields.~~ The existing infrastructure that provides non-potable water to livestock watering troughs would be used to continue to support livestock operations and establish the new landscaping. Therefore, impacts to water supply are considered less than significant; there is adequate existing supply to meet project demand.

f, g. Cal Poly operates an integrated waste management program that includes source use reduction, recycling, composting of food waste, green waste, and manure, resale of scrap metal and surplus equipment, and zero waste event catering. Cal Poly contracts with San Luis Garbage for collection of solid waste and recycling. Recycling containers are provided to faculty, staff, and students by Facility Services, and collection is performed by Custodial Services and the campus Recycling Coordinator. Cal Poly has a 50% diversion goal for solid waste. The University has met or exceeded that goal since 2003, with almost 80% diversion achieved in 2010. Paper, cardboard, aluminum, glass and plastics are collected and sent to recycling facilities. Campus Dining sends food waste to a composting operation. The University also encourages recycling through its procurement policies: to the extent possible, all products must be recyclable or made from recycled materials.

The University also requires contractors to divert as much waste as possible during construction projects. Recent development projects on campus have achieved construction diversion rates as high at 97%. Solid waste which is not diverted by the University is transported to the Cold Canyon Landfill. The Landfill is

located approximately 7 miles from San Luis Obispo. The landfill serves private entities and municipalities throughout San Luis Obispo County. The landfill has recently expanded and now operates near 50% of permitted capacity (250,000 tons per year [tpy] of a 500,000 tpy capacity) (Cal Poly 2014).

Solid waste and recyclable materials would be generated during site preparation, construction, operation of the proposed project. Waste generated during site preparation will include excavated soil during Phases 1, 2, and 3, which would be deposited as fill within the project impact boundaries, and demolition debris. The University intends to reuse as much material as possible, including use on campus. The proposed project would be consistent with all state and local regulations regarding solid waste diversion, and at least 50% of the campus' solid waste is diverted to a licensed recycling facility, as noted above. Impacts would be less than significant. Maintaining the existing diversion rate would ensure compliance with Assembly Bill 75, which requires all large state facilities to divert at least 50% of solid waste from landfills. Therefore, a less-than-significant impact to solid waste policies and programs would occur.

Mitigation Measures

None required.

Conclusion

Impacts associated with utilities are considered less than significant; sufficient capacity exists to accommodate increased demand for services.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of probable future projects)		X		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion of Checklist Answers

a. As described throughout this document, the project may degrade the quality of environment, including air quality, biological resources, and cultural resources. Mitigation provided in the document would reduce all impacts to a less than significant level. Based on implementation of mitigation, the project would not substantially reduce habitat or fish or wildlife populations or adversely impact historic resources.

b. Impacts of the project can be mitigated to a less than significant level. Impacts are largely confined to the project itself, and would not lead to cumulatively considerable impacts.

c. As described throughout this document, the project may degrade the quality of environment, including air quality. Mitigation provided in the document would reduce all impacts to a less than significant level.

DETERMINATION

Pursuant to Sections 15152 and 15168 of the State CEQA Guidelines, this initial study has been prepared to evaluate the potential impacts of the proposed project.

On the basis of this initial evaluation:

____ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

_X_ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the mitigation measures described in the initial study. **A NEGATIVE DECLARATION** will be prepared.

____ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

____ I find that the proposed project **MAY** have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

____ I find that although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Name **Austin Creel, Project Manager**
For Julie Hawkins, University Planner

April 18, 2017
Date

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APPENDIX A. VISUAL IMPACT ASSESSMENT

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OPPENHEIMER PAVILION AND AGRICULTURAL EVENT CENTER PROJECT VISUAL IMPACT ASSESSMENT

January 2017

PREPARED FOR

California State Polytechnic University
San Luis Obispo

PREPARED BY

SWCA Environmental Consultants
1422 Monterey Street, Suite C200
San Luis Obispo, CA 93401

Oppenheimer Pavilion and Agricultural Event Center
Visual Impact Assessment

Prepared for

California State Polytechnic University San Luis Obispo

Prepared by

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SWCA Project No. 40530

December 30, 2016

CONTENTS

Figures

1 INTRODUCTION

This study assesses visual impacts that may result from the proposed construction of an agriculture pavilions and event center facility on the University campus along Via Carta Road and Highland Drive (refer to Figure 1). The purpose of this analysis is to determine if a change in the visual environment would occur, whether that change would be viewed as a positive or negative one, and the degree of any change relative to the existing setting. If the project has the potential to cause visual impacts, this study specifically defines those impacts.

This analysis focuses on the potential for the proposed project components to result in impacts on visual resources as seen from public locations and roadways. For the purpose of this study, public viewpoints are considered to be from the surrounding community, not from within the campus itself. The baseline visual condition is analyzed, visual resources identified, and a baseline scenic character established. The analysis methodology evaluates the aggregate affect that the project may have on the overall visual character of the project site and surrounding landscape. If a change in character is identified, it is compared to viewers' expected sensitivity, and is reviewed for consistency with applicable county and state planning policies. Levels of impact are determined according to California State University/ California Environmental Quality Act (CEQA) definitions and guidelines.

2 PROJECT DESCRIPTION

California Polytechnic State University, San Luis Obispo proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Collectively, these improvements are referred to as the Peter and Mary Beth Oppenheimer Pavilion and Agricultural Event Center Project (project). Proposed project components include demolition of existing structures; upgrades to existing structures, such as the construction of a roof for existing equestrian pavilion (Pavilion 1) and an expansion to the existing hay barn located within the equine center; as well as the development of new facilities, including a new equestrian pavilion (Pavilion 2), foaling barn, stallion barn, animal health center, storage barn, and event center within the equine center, environmental horticultural sciences, and beef unit areas, and a new greenhouse and farm store located within the crops unit area. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation.

The proposed project includes four conceptual phases for the planned improvements. Phases 1, 2, and 3 are generally located in the northern extent of the campus, within the areas defined in the Master Plan as the "Equine Unit", "Environmental Horticulture", and "Agriculture Pavilion". For the purposes of this Visual Impact Assessment, this project area is be referred to as the "Oppenheimer project site". The Phase 1 project area encompasses approximately 25 acres, Phase 2 encompasses approximately 13 acres, and Phase 3 encompasses approximately 11 acres of the Oppenheimer project site. The Oppenheimer project site currently supports various equine, environmental horticulture, and beef unit facilities including a hay barn, mare barns, breeding barns, a stallion barn, horse barn, equine center, soil science greenhouse, lath houses, tractor barn, Garcia barn, greenhouses, shade house, bug house, pesticide storage, science labs, beef unit facilities, and residential structures. This project area is accessed via Village Drive, Via Carta, and unnamed, unpaved access roads. The Oppenheimer project site is shown on Figures 1 and 2. Phase 4 of the project is located in the central portion of campus, northwest of the intersection of Highland Drive and Mt. Bishop Road within the area defined in the Master Plan as the "Crops Unit". For the purposes of this Initial Study, this project area shall be referred to as the "Crop Sciences project site". The Phase 4 project area encompasses approximately 7 acres. The Crop Sciences project site currently supports crop sciences support facilities, insecticide/herbicide/pesticide storage facilities, a chemical mixing lab, wastewater containment, greenhouses, and a crop sciences lab. This project area is bordered by active agriculture operations to the north and south and is accessed via Mt. Bishop Road to the east and

Highland Drive and West Creek Road to the South. The Crop Science project site is shown on Figures 1 and 4.

2.1 Project Components

The project proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Proposed project components include demolition of existing structures, upgrades to existing structures, as well as the development of new facilities. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation. The project consists of four project phases: Phase 1 (Equestrian Pavilion, Foaling Barn, Stallion Barn), Phase 2 (Equestrian Pavilion, Animal Health Center, New Storage Building), Phase 3 (Agriculture Event Center), and Phase 4 (Crop Sciences). The project components associated with each project phase are summarized in Table 1 and described in detail below.

Phase 1: Equestrian Pavilion, Foaling Barn, Stallion Barn

Phase 1 is estimated to commence construction in May 2017 and be completed in December 2017. Phase 1 includes the demolition of three existing structures, the Stallion Barn, the Horse Barn, and the Equine Center, all located within the campus Equine Center. The total area of structures to be demolished encompasses approximately 8,821 sq. ft. New project components to be constructed during Phase 1 of the proposed project include a 59,957 sq. ft.. a roof over the existing equestrian pavilion (Pavilion 1), a new 2,048 sq. ft. foaling barn, a new 4,798 sq. ft. stallion barn, a 2,640 sq. ft. expansion to the existing hay barn, and two new detention basins to control surface water runoff from the Phase 1 project area. Phase 1 would also include the construction of new unpaved access roads to provide circulation for vehicles, new horse arenas, and landscaped areas.

Phase 2: Equestrian Pavilion, Animal Health Center, New Storage Building

Phase 2 is estimated to commence construction in September 2020 and be completed in September 2021. Phase 2 includes the demolition of 15 existing Environmental Horticultural Science support facilities, including a residential structure, lath houses, greenhouses, barns, and storage structures. The total area of structures to be demolished encompasses approximately 62,582 sq. ft. New project components to be constructed during Phase 2 of the proposed project include a new 54,580-ft^2 equestrian pavilion (Pavilion 2), a new 10,000 sq. ft. animal health center, a new 3,000 sq. ft. storage barn, and a new pedestrian bridge above an unnamed drainage. Phase 2 would also include the construction of new unpaved access roads to provide circulation for vehicles, new horse paddocks, and landscaped areas. The largest project component associated with Phase 2 is the new equestrian pavilion (Pavilion 2), which is expected to include approximately 45,000 sq. ft. of covered arena floor, 1,158 sq. ft. of seating/circulation areas, 200 sq. ft. of tack walls, 1,200 sq. ft. of pony lines, 3,600 sq. ft. of holding pens, 620 sq. ft. of restroom areas, 500 sq. ft. for an equine managers office, 1,500 sq. ft. of classroom space, and 80 sq. ft. of mechanical/electrical utilities.

Phase 3: Agricultural Event Center

Phase 3 is estimated to commence construction in September 2020 and be completed in September 2022. Phase 3 includes the demolition of two existing structures, including the Beef Unit and the Herdsman Hall, both located within the campus Beef Unit. The total area of structures to be demolished encompasses approximately 6,731 sq. ft.. New project components to be constructed during Phase 3 of the proposed project include the new 88,150 sq. ft. agricultural event center and associated parking facilities. The new agricultural event center would be two levels. The upper level would encompass 27,218 sq. ft., supporting 10,000 sq. ft. of area seating, 2,610 sq. ft. of restrooms, 7,908 sq. ft. for a circulation concourse, 1,250 sq. ft. of concessions, 800 sq. ft. for an event/ticketing office, 4,100 sq. ft. for a multi-use classroom, and 200 ft^2 for custodial services/storage space. The lower level would encompass

60,860 sq. ft., supporting 27,800 sq. ft. of arena floor, 1,800 sq. ft. of show office/official lounge area, 1,160 sq. ft. for circulation area, 200 sq. ft. for restrooms, 8,400 sq. ft. for staging areas, 2,000 sq. ft. for arena storage space, 2,400 sq. ft. for open penning areas, 500 sq. ft. for a trash room, 400 sq. ft. for building support, and 6,200 sq. ft. for a return alley. Phase 3 would also include the construction of new unpaved access roads to provide circulation for vehicles, drainage control facilities, and landscaped areas.

Phase 4: Crop Sciences

Phase 4 is estimated to commence construction in May 2018 and be completed in September 2020. The Phase 4 project area encompasses approximately 5.5 acres located within the campus Crops Unit area. Phase 4 includes replacing a portion of the existing Crop Science Complex with a new farm store that would include new state of the art research, production greenhouses and associated support facilities to replace the greenhouse structures that would be demolished under Phase 2 of the project. Phase 4 also includes the construction of new greenhouse and support facilities including a new fruit and vegetable processing and research facility, a new plant sciences teaching and research laboratory building, and a new storage facility for restricted products and equipment. These project components are conceptual and have not undergone design yet. The Phase 4 project components would be accessed via Mt. Bishop Road to the east and Highland Drive and West Creek Road to the South.

It is expected that the greenhouse may include retractable roofing systems, open-ended hoop houses, and state of the art production greenhouses with automated hydroponic, lighting, and irrigation systems to create controlled environments within which specialized ornamental and food plants can be grown. The fruit and vegetable processing facility would contain processing lines that are representative of current state of the art technology, including automated cull detection and grading equipment, cleaning, sorting and packing apparatuses. The facility would represent the state of current technology in terms of food and worker safety. This facility would be able to accommodate both conventional and organic processing. The plant science teaching and research building would consist of labs, a honey room, and open space for the periodic processing of field collected samples that is routine in plant science research. The facility would support research in the burgeoning area of the soil, water, air, and plant interface accommodating scientists from all four of those disciplines. The storage facility would be used to store pesticides and controlled products, as well as farming equipment that is sensitive to the elements. The existing Building 017O – Crop Science would be retained and converted into a farm store where all agricultural products produced on campus can be sold in one place. This would include dairy, meat, eggs, processed food products, fruits and vegetables, ornamental plants, a tasting room for Cal Poly produced wine, beer and spirits, and a dairy bar to serve ice cream products. The College envisions maintaining and upgrading the historical external structure while remodeling the interior to create the store.

Figure 1. Project Locations and Key Viewing Area Map

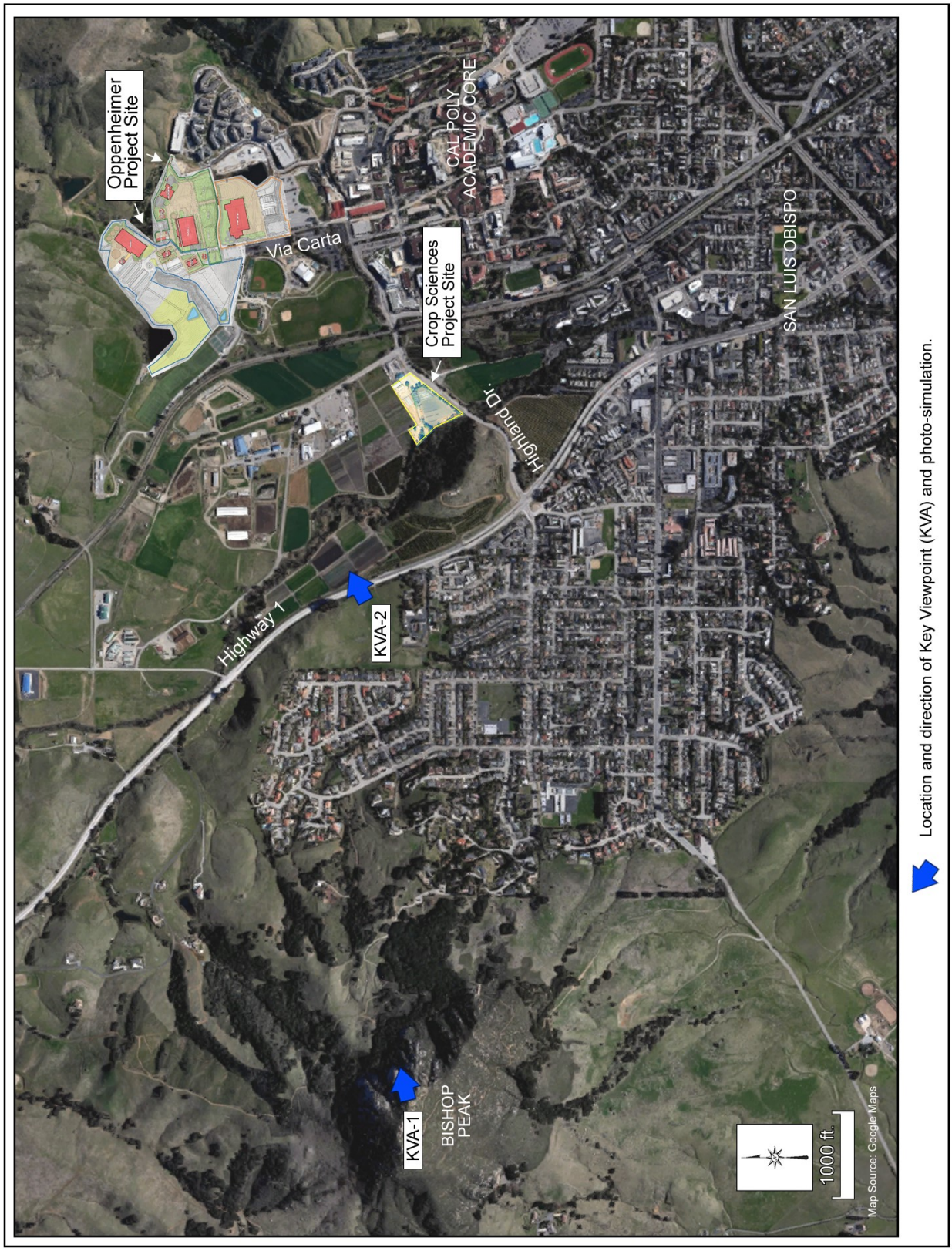

Figure 2. Oppenheimer Project Area Plan

Figure 3. Oppenheimer Project Conceptual Design

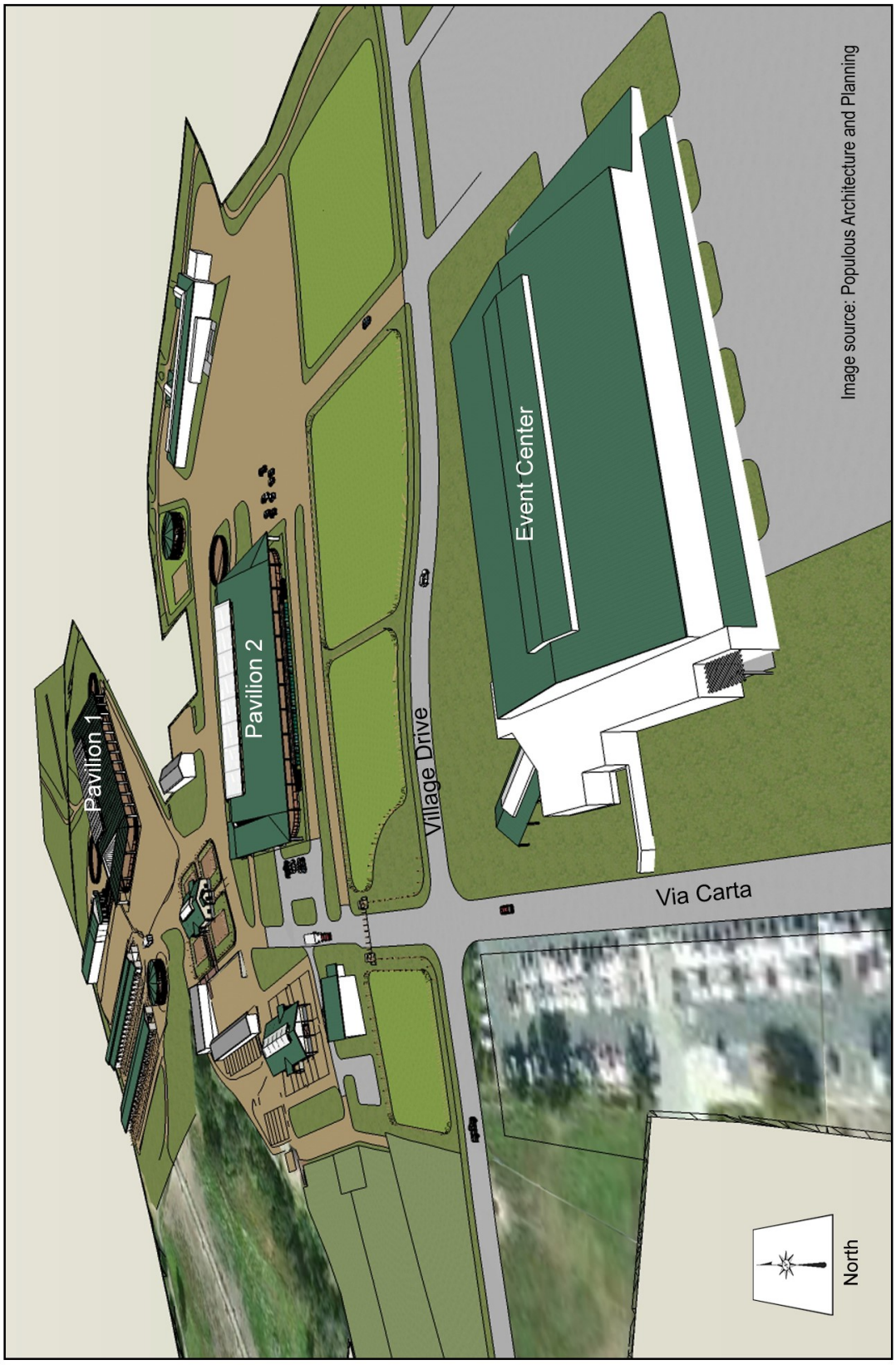

Figure 4. Crop Science Project Area Boundary

3 PROJECT SETTING

The main Cal Poly campus occupies over 6,000 acres at the northeastern edge of the City of San Luis Obispo, at the base of the western foothills of the Santa Lucia Range in central San Luis Obispo County. The visual character of the campus is influenced by both built and natural elements. Located adjacent to the City of San Luis Obispo, the campus and project site are also situated at the eastern end of the highly scenic Chorro Valley, which runs from San Luis Obispo northwest to Morro Bay and the Pacific Ocean. University lands include range and agricultural areas as well as natural preserves, in addition to more developed areas. The more developed portion of campus is identified as the "campus instructional core" and includes agricultural support facilities, and academic, housing and administrative buildings. The campus instructional core is generally bound by Highland Drive on the north, California Boulevard on the west, Slack Street on the south, and foothills on the east.

The project includes four conceptual phases for the planned improvements. Phases 1, 2, and 3 are generally located in the northern extent of the campus, within the areas defined in the Campus Master Plan as the "Equine Unit", "Environmental Horticulture", and "Agriculture Pavilion". For the purposes of this Visual Impact Assessment, this project area is referred to as the "Oppenheimer project site". The Phase 1 project area encompasses approximately 25 acres, Phase 2 encompasses approximately 13 acres, and Phase 3 encompasses approximately 11 acres of the Oppenheimer project site. The Oppenheimer project site currently supports various equine, environmental horticulture, and beef unit facilities including a hay barn, mare barns, breeding barns, a stallion barn, horse barn, equine center, soil science greenhouse, lath houses, tractor barn, Garcia barn, greenhouses, shade house, bug house, pesticide storage, science labs, beef unit facilities, and residential structures. This project area is accessed via Village Drive, Via Carta, and unnamed, unpaved access roads. The Oppenheimer project site is shown on Figures 1 and 2. Phase 4 of the project is located in the central portion of campus, northwest of the intersection of Highland Drive and Mt. Bishop Road within the area defined in the Master Plan as the "Crops Unit". For the purposes of this Visual Impact Assessment, this project area shall be referred to as the "Crop Sciences project site". The Phase 4 project area encompasses approximately 7 acres. The Crop Sciences project site currently supports crop sciences support facilities, insecticide/herbicide/pesticide storage facilities, a chemical mixing lab, wastewater containment, greenhouses, and a crop sciences lab. This project area is bordered by active agriculture operations to the north and south and is accessed via Mt. Bishop Road to the east and Highland Drive and West Creek Road to the South. The Crop Sciences project site is shown on Figures 1 and 4.

Northwest of campus, the Chorro Valley is generally defined by the Santa Lucia hills and the Cuesta Ridge to the northeast, and the Morros, a series of distinct mountain peaks rising up from the valley to the southwest. The Morros are recognized in County of San Luis Obispo planning documents as highly scenic visual resources that should be protected (County of San Luis Obispo 2010), and the Cal Poly Master Plan Final Environmental Impact Report (EIR) identifies the Morros as a scenic resource that provides a dramatic backdrop to the University (California State University 2001).

Highway 1 through the Chorro Valley and continuing north to the city of Monterey in Monterey County is both a Designated State Scenic Highway and an All-American Road in the National Scenic Byway system. Each of these designations indicate a high degree of scenic quality within the highway's view corridor.

4 VISUAL ASSESSMENT METHODOLOGY

The findings of this study are based on multiple field visits conducted during November and December 2016, including review of the entire site as well as the surrounding area. Resource inventories were conducted both on foot and from moving vehicles, during the day and nighttime. Existing visual resources and site conditions were photographed and recorded. Assessment of project elements was

based on conceptual plans and descriptions provided by Cal Poly. Planning documents and previous studies relevant to the surrounding area were referred to for gaining an understanding of University and community aesthetic values.

The project site was viewed from potential public viewer group locations in the areas surrounding the campus. Representative viewpoints were identified for further analysis, based on dominance of the site within the view, duration of views, and expected sensitivity of the viewer group. Of those representative viewpoints, Key Viewing Areas (KVAs) were selected that best illustrate the visual changes that would occur as a result of the project (refer to Figure 1).

Photo-simulations were prepared to quantify potential project visibility and to assess related visual effects. Images of the existing views as well as photo-simulations of the proposed project from the KVAs are shown in Figures 5 through 8.

5 REGULATORY SETTING

The project is located within the jurisdiction of the California State University (CSU). The regulatory setting is defined in applicable planning policies, the Cal Poly Master Plan and EIR, and in the CSU California Environmental Quality Act (CEQA) Handbook.

5.1 California State University Initial Study Checklist

Appendix B of the CSU CEQA Handbook requires that the following issues be considered in determining the level of project impacts, found in the CSU Initial Study Checklist:

Will the project:

a) Have a substantial adverse effect on a scenic vista?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Following is a compilation of excerpts of Cal Poly visual policies and guidelines applicable to the project site. Underlined text is added to emphasize key relevant language.

5.2 Campus Land Use and Design Guidelines

CAL POLY MASTER PLAN PRINCIPLES SUMMARY

Land Use

2) Environmental suitability and sustainability: avoid sensitive areas; take advantage of environmental assets; direct development to areas with fewer regulatory and environmental constraints; enhance environmental areas; promote resource and energy efficient design.

3) Compatibility: be considerate of impacts on neighborhoods near campus.

6) Green space: protect environmentally sensitive areas; design green space into each land use; use green space to create a sense of place, visual continuity and visual and physical links throughout the campus.

Natural Environment

14) Aesthetics: Protect scenic resources and take advantage of them in new designs.

Public Facilities and Utilities

55) Invisibility: Conceal these kinds of uses from view to the extent possible unless some important academic function dictates otherwise.

5.3 Cal Poly Master Plan and Environmental Impact Report – 2001

The 2001 Cal Poly Master Plan is the primary document governing land use and capital improvements on campus through the year 2020. The Oppenheimer and Crop Sciences project sites are located within areas designated for "Outdoor Teaching and Learning" land uses (Land Use, San Luis Creek Watershed, Exhibit 5.1). The Master Plan includes one of the project components, Pavilion 2, identified as the "New Agriculture Pavilion". The Master Plan envisioned this facility as a multi-purpose agriculture pavilion within walking distance of the campus core on the site currently occupied by the old Beef Unit, Livestock Pavilion and Herdsman Hall, intended to accommodate lost access due to relocating the bull test to Chorro Creek Ranch and improve access from other animal units on the main campus. This facility is also intended to replace the existing Beef Unit, Beef Pavilion, Herdsman Hall and abattoir functions. The additional project components were not identified at the time the Master Plan was adopted

5.3.1 Chapter 5 – Physical Plan Elements

BACKGROUND AND ISSUES

Issues

> *Impacts such as view obstruction, noise, light and odors caused by changes in land uses adjacent to, or visible from, nearby neighborhoods".*
>
> *Concern about compatibility of Cal Poly land uses with City and County land use policies.*

Principles

> *"Cal Poly's approach to land use planning recognizes seven basic principles: balance among land uses that serve the University's academic mission, environmental suitability and sustainability, compatibility between adjacent uses, proximity among related uses, compactness in the instructional core, protection and provision of green space, and community building".*

Green Space

> *Green space is an integral part of the environment and is essential to the physical and social well-being of the campus. Cal Poly uses its lands in many different ways, ranging from passive recreation and study, and rural, agricultural uses to intense residential, recreational, and instructional activities. Green space plays a different role for each use, depending on the level of activity. Thus, this principle calls for planning, protecting and managing scenic and environmentally sensitive areas on the main campus, San Luis Obispo Creek watershed ranches*

and Chorro Creek watershed ranches, consistent and complementary with outdoor learning, and the maintenance of environmental quality to sustain an attractive and resource efficient campus. In addition, it calls for the provision and design of green space as a component of each land use in the extended campus - including agricultural units as well as new residential complexes.

OUTDOOR TEACHING AND LEARNING

The Campus Master Plan "Development Suitability Map", Exhibit 4.1.1 shows the Oppenheimer project site as being "Suitable for Agricultural Facilities Enhancement". The Crop Sciences project site is shown as "Suitable for Facilities Enhancement".

Principles

Visibility

The centrality of outdoor teaching and learning also calls for these lands and facilities to be a highly visible, even tangible, part of the main campus image - not just on outlying lands.

Integration

Outdoor teaching and learning activities that do not require extensive amounts of land should be integrated within the campus core as well as in outlying areas. For example, landscaped areas around buildings can also serve as study areas for different types of plants. All campus users should have the opportunity to experience outdoor teaching and learning lands and facilities.

New Agriculture Pavilion

A multi-purpose agriculture pavilion within walking distance of the campus core on the site currently occupied by the old Beef Unit, Livestock Pavilion and Herdsman Hall will accommodate lost access due to relocating the bull test to Chorro Creek Ranch and will improve access from other animal units on the main campus. This facility will replace the existing old Beef Unit, Beef Pavilion, Herdsman Hall and abattoir functions.

Environmental Consequences

The Campus Master Plan 2001 states that: *"Temporary noise and air quality impacts associated with the redevelopment will be significant, but mitigable (Class II). Other impacts are considered less than significant (Class III)".*

6 VIEWER SENSITIVITY

Sensitivity to change in the visual environment varies with the viewer's activities and expectations. In determining the viewer sensitivity level for purposes of assessing visual impacts associated with the project, the number of viewers as well as exposure, duration and dominance of views were also considered. In addition, sensitivity regarding aesthetic and visual quality issues is reflected in the following federal, state, and local planning and regulatory excerpts:

6.1 State and National Scenic Highway Designations

In 1999, Highway 1 was designated by the State of California as an Officially Designated Scenic Highway. The County of San Luis Obispo promoted the designation based on the high level of existing visual quality along the corridor as well as the desire to protect its visual resources in the future. In 2003,

Highway 1 was also bestowed the title of "All-American Road" in the National Scenic Byway program. This designation recognizes the visual characteristics of the Highway 1 corridor as being among the highest quality in the nation. These designations illustrate the highest level of concern and viewer sensitivity for the aesthetics regarding the highway corridor, the project site, and beyond.

6.2 Applicable County of San Luis Obispo Visual Policy

6.2.1 General Plan Conservation and Open Space Element, Chapter 9 – Visual Resources

This section defines the following as major visual issues:

6.2.1.1 SCENIC CORRIDORS

Scenic corridors are view areas, or "viewsheds" from popular public roads and highways that have unique or outstanding scenic qualities. Inappropriate development or billboards can intrude upon these viewsheds. Some examples are highly visible graded roads and pads, buildings that are too close to a highway, and building designs that silhouette against the skyline, telecommunications facilities, utilities, signage, and other structures that dominate rather than blend with a natural landscape. Scenic highways and roads are scenic corridors that are designated to conserve and enhance their scenic beauty. Highway 1 is a designated State Scenic Highway and National Scenic Byway from San Luis Obispo to the Monterey County line.

6.3 Applicable City of San Luis Obispo Visual Policies

6.3.1 San Luis Obispo General Plan - Conservation and Open Space Element

9.2.1. Views to and from public places, including scenic roadways.

Note: The Oppenheimer project site is partially visible from Highway 1, which is identified as a "Roadway of High or Moderate Scenic Value Outside of the City Limit" in the *Conservation and Open Space Element – Scenic Roadways Map, Figure 11*.

The City will preserve and improve views of important scenic resources from public places, and encourage other agencies with jurisdiction to do so. Public places include parks, plazas, the grounds of civic buildings, streets and roads, and publicly accessible open space. In particular, the route segments shown in Figure 11 [of the Conservation and Open Space Element] are designated as scenic roadways.

A. Development projects shall not wall off scenic roadways and block views.

B. Utilities, traffic signals, and public and private signs and lights shall not intrude on or clutter views, consistent with safety needs.

C. Where important vistas of distant landscape features occur along streets, street trees shall be clustered to facilitate viewing of the distant features.

D. Development projects, including signs, in the viewshed of a scenic roadway shall be considered "sensitive" and require architectural review.

9.3. Programs

The City shall do the following to protect and enhance views, and will encourage others to do so, as appropriate.

9.3.6. View blockage along scenic highways.

Determine that view blockage along scenic roadways is a significant impact.

9.3.9. Undergrounding utilities.

Place existing overhead utilities underground, with highest priority for scenic roadways, entries to the city, and historical districts.

15. SCENIC ROADWAYS

15.1.1. Scenic Routes

The route segments shown in Figure 11 of the Conservation and Open Space Element – Scenic Roadways Map --are designated as scenic roadways.

15.1.2. Development Along Scenic Routes

The City will preserve and improve views of important scenic resources form streets and roads. Development along scenic roadways should not block views or detract from the quality of views.

A. Projects, including signs, in the viewshed of a scenic roadway should be considered as "sensitive" and require architectural review.

B. Development projects should not wall off scenic roadways and block views.

C. As part of the city's environmental review process, blocking of views along scenic roadways should be considered a significant environmental impact.

F. Lighting along scenic roadways should not degrade the nighttime visual environment and night sky per the City's Night Sky Preservation Ordinance.

7 PROJECT VISIBILITY

The project would be visible from few public viewpoints in the surrounding area. This limited visibility would be mostly from Highway 1 and from Bishop Peak dedicated open space and recreation trails as follows:

7.1 From Highway 1

The Oppenheimer Project Site would be partially visible along an approximately 800-foot section of Highway 1. The viewing distance from the highway to the project site would be approximately 0.8 mile, seen to the north and generally perpendicular to the direction of travel. The total duration of visibility along Highway 1 would be approximately 9 seconds for motor vehicles travelling at the posted speed limit. An average of 24,500 vehicles pass by the project site each day (Caltrans 2014 data). Bicyclists travelling at a speed of 15 miles per hour could potentially have views of the project for approximately 36 seconds.

From Highway 1 the project would occupy a small percentage of the overall viewshed, and would be seen in the context the western portion of campus, including several agricultural buildings and support facilities. Various sports fields including Bob Janssen Field and Baggett Stadium would be visible in the project vicinity, and multi-story campus housing facilities would be part of the background view, with the open space and natural areas of the Santa Lucia foothills in the distance.

As seen from this viewing location, much of the Oppenheimer Project Site would be visually blocked by intervening vegetation, topography, or both. The viewing distance of nearly a mile would also reduce noticeability of the project. The Crop Science Project Site would not be visible from Highway 1.

7.2 From Bishop Peak

The project site can be easily seen from sections of the public recreation trails throughout Bishop Peak and the Bishop Peak Natural Preserve. Because of the elevated viewing position of these viewpoints, the project would be visible in the context of the overall campus and the greater Chorro Valley, including the highly scenic Morros and variety of topographic and natural vegetative elements. The viewshed would also include the overall patterns of land use development including the City of San Luis Obispo, the California Men's Colony, Camp San Luis, and others. From Bishop Peak, the project would be seen at a viewing distance of approximately 1.5 to 2 miles. Although visible, because of the panoramic viewshed, the project would occupy a relatively small percentage of the overall scenery. The Crop Science Project Site would be substantially blocked by Radio Hill on campus and would have very limited visibility from Bishop Peak recreational trails.

7.3 Other Viewpoints

Because of the project sites' location near the center of campus, viewing distances, intervening topography, development and vegetation, the projects would not be readily seen throughout the surrounding community, if at all. If seen, because of the viewing distances and project context, any views from these areas would include the existing campus and the adjacent city, which would serve to minimize noticeability of the project.

Both the Oppenheimer Project Site and the Crop Science Project Site would be visible to the public while travelling on Amtrak passenger trains. From the railroad tracks the projects would be seen in the context of the developed portion of the campus, at a viewing distance of less than one-half mile.

8 VISUAL IMPACT ANALYSIS

8.1 The Project's Effect on Scenic Vistas

Scenic vistas are generally defined as high-quality views displaying good aesthetic and compositional value that can be seen from public viewpoints. If the project substantially degrades the scenic landscape as viewed from public roads, or in particular designated scenic routes, or from other public or recreation areas, this would be considered a potentially significant impact on the scenic vista. Scenic vistas related to the viewing experience associated with this project include views of the Morros, the Santa Lucia Mountains and foothills, Cuesta Ridge, important rock outcroppings, patterns of natural vegetation, and predominant pastoral land.

As seen from Highway 1 the project would not block or reduce existing views of the Morros, Santa Lucia foothills, or other important landforms. The tallest of the proposed structures would be the Pavilions and the Event Center. The highest point of those structures would be Pavilion 1 at approximately 480 feet above sea level, while Bishop Peak and the Morros rise to approximately 1,500 feet and the Santa Lucia Foothills reach more than 2,000 feet above sea level. As a result the project would only be seen at the

lower portion of the vista from Highway 1. The project would be visually back-dropped by other campus development, and would have no effect on views to the surrounding hills or ridgelines (refer to Figure 8). In addition, views of scenic pastoral land would not be diminished since the project would be seen generally as infill among existing agricultural facilities.

As seen from viewpoints on Bishop Peak the project would be hundreds of feet below the viewer and would not extend into the surrounding viewshed or effect scenic vistas (refer to Figure 6). The project would be seen in the context of the overall campus and city development and would have no effect on the panoramic scenic vista.

Impact 1 **The project would build structures which would be seen from the surrounding area but would not interfere with views. Specifically, Pavilion 1 and Pavilion 2 would be potentially visible from a short section of Highway 1, and from viewpoints on Bishop Peak. However because of the viewing distances and structures' low elevations relative to the surrounding hills, they would occupy only a very small portion of the viewshed and would not distract from the overall visual quality, resulting in a less-than significant effect on the scenic vista (CEQA Class III). Accordingly, no mitigation would be necessary.**

8.2 The Project's Effect on Specific Scenic Resources as seen from the State Scenic Highway

A scenic resource is a specific feature or element with a high degree of memorability or landmark characteristics that contributes to the high visual quality of the corridor. From along Highway 1 through the Chorro Valley, the Morros, Cuesta Ridge, unique rock outcroppings, significant groupings of trees, and certain old ranch buildings are considered the primary scenic resources. The project would result in a significant impact if it were to damage or have a substantial negative effect on views of any of those specific resources as seen from Highway 1, an Officially Designated State Scenic Highway.

Although a portion of the project would be seen from Highway 1, particularly Pavilion 1 and Pavilion 2, those structures would not block views of the Santa Lucia foothills, unique rock outcroppings, significant groupings of trees, or any historic-looking ranch buildings. Potential views of the project would exist along an approximately 800-foot section of Highway 1. Direct views of the surrounding hills and other scenic resources would be unaffected by the project. The project would occupy a small portion of the mid-ground context for those views, and would result in no reduction of the compositional value of the scenic resource setting.

Impact 2 **The project would add structures into the distant mid-ground landscape as seen from a short section of Highway 1. However because of the viewing distance and proposed structures' low elevations relative to the surrounding scenic hillsides, they would occupy only a very small portion of the viewshed and would not distract from the overall visual quality, resulting in a less-than significant effect on scenic resources as seen from the State Scenic Highway (CEQA Class III). Accordingly, no mitigation would be necessary.**

8.3 The Project's Effect on the Existing Visual Character and Quality of the Site and its Surroundings

The visual character of the project site and its surroundings is defined by both built and natural elements. Much of the natural visual setting is established by the combination of the dramatic topography and

mountain peaks along with the open space and pastoral agriculture of the Chorro Valley and western portion of the Cal Poly campus.

The City of San Luis Obispo and the Cal Poly campus core help establish a generally urban character through the eastern end of the valley. In the project vicinity and the areas west of the campus core the visual character transitions to a more open, working-agricultural setting. Throughout this area a variety of agricultural labs, support buildings and fields are interspersed with athletic facilities. As seen from the surrounding community, intervening topography, mature vegetation and other development substantially limit views to the project area and the adjacent mostly agricultural landscape.

A few of the proposed structures at the westernmost portion of the project would be visible from Highway 1. Of these, the area around Pavilion 1 and Pavilion 2 would be the most visible. Pavilion 2 would be only partially visible through the intervening vegetation. The Event Center would be almost completely screened from view and would not be discernable from the surrounding landscape context. From viewpoints on Highway 1 the Crop Sciences Project would not be seen.

From elevated public viewpoints such as the trails on and near Bishop Peak, the Oppenheimer Project Site would be seen at a distance of approximately 1.5 to 2 miles, in the context of the surrounding campus. Although visibility of the Crop Science Project Site from elevated viewpoints would be substantially blocked by Radio Hill and other topography and vegetation, portions of it could be potentially seen depending on the specific type of development proposed. However even if visible, the Crop Science Project Site would be viewed in the context of nearby development and agriculture-related uses.

The primary scenic value of the project site is that it provides a semi-pastoral and agricultural mid-ground to the dramatic hillside backdrop of the Morros and Santa Lucia mountains. The site and its surroundings visually support the agricultural character and heritage valued by Cal Poly, San Luis Obispo County, and the City of San Luis Obispo.

In general, existing development in the project vicinity is visually subordinate to the rural and agricultural character of the overall landscape. Although portions of the project would be visible from public viewpoints, these viewpoints would be limited to a short section of Highway 1, and to the Bishop Peak recreational areas. Where visible, the adjacent hills and mountain peaks rising up to the east would tend to dominate the views and to a great degree define the overall visual character. The project elements, when seen would be visually compatible with the working-agriculture setting of that part of campus. In addition, it is expected that to most casual observers, the proposed project buildings, paddocks and accessory structures would visually blend with the surroundings and would not be readily noticeable. The projects would be constructed in phases, which would allow a gradual transition from the current visual condition to project build-out.

Impact 3 **Because of the project's location, visibility from public viewpoints would be limited. In addition, where visible, although the project would add new structures to the area, they would not appear out of place in the existing working-agricultural setting. Combined with the visual dominance and character-defining qualities of the surrounding hills, the project would be subordinate to the larger viewshed and would resulting in a less-than significant effect on the visual character and quality of the site and its surroundings (CEQA Class III). Accordingly, no mitigation would be necessary.**

8.4 Project Light or Glare Affecting Day or Nighttime Views in the Area

The project would result in a significant impact if it subjects public viewing locations to a substantial amount of point-source lighting visibility at night, a noticeable spillover effect into the nighttime sky, or a substantial amount of daytime glare into the surrounding area. The height and placement of lighting, source of illumination, and fixture types combined with viewer locations, adjacent reflective elements, and atmospheric conditions can affect the degree of change to nighttime views. If the project results in direct visibility of a substantial number of lighting sources, allows a substantial amount of light to project toward the sky, or creates a substantial amount of daytime glare, significant lighting impacts would result.

Existing night lights in the area include a few buildings associated with the Equine and Environmental Horticulture units and the parking lots along Via Carta. The elevated sports field lighting of Bob Janssen Field and Baggett Stadium are in the immediate vicinity of Pavilion 2 and can be seen from a wide area of the campus. As viewed from Highway 1, the lights of the multi-story student residences and the parking garages can be seen directly behind and to the north of the project site

At the time of this report, no specific information has been provided regarding proposed project lighting. It is reasonable to assume however that a significant number of lights will be included as part of the project. Because of the inherent activities and events associated with the project, the multi-story and open-air pavilion architecture, public safety and logistic requirements, security and equestrian safety needs, night lighting would contribute to the lighting seen in the area. Unshielded light sources, large buildings with bright interior and exterior lights, large windows and wall openings, illuminated staging areas, parking and pedestrian areas all would have the potential to result in an increase in the visible light level as seen from Highway 1 the surroundings. In addition, daytime reflection and glare from large shiny roof materials and exterior surfaces also would have the potential be noticeable from great distances.

Impact 4 **Because of the project's size, structure configurations, intended use, and health and safety requirements, the project has the potential to result in the introduction of a substantial amount of new nighttime light and daytime glare into area, resulting in potentially significant direct long-term impacts.**

MM-1 *Prior to approval of each project phase, a comprehensive lighting plan shall be submitted for review and approval for that phase. The lighting plan shall be prepared using guidance and best practices endorsed by the International Dark Sky Association. The lighting plan shall address all aspects of the lighting, including but not limited to all buildings, infrastructure, parking lots and driveways, paths, recreation areas, safety, and signage. The lighting plan shall also consider effects on wildlife in the surrounding area. The lighting plan shall include the following at a minimum:*

a. *The point source of all exterior lighting shall be shielded from off-site views.*

b. *Light trespass from exterior lights shall be minimized by directing light downward and utilizing full cut-off fixtures or shields.*

c. *Lumination from exterior lights shall be the lowest level allowed by public safety standards.*

d. *Exterior lighting shall be designed to not focus illumination directly onto exterior walls.*

e. Any signage visible from off-site shall not be internally luminated.

f. Light trespass from interior and arena lights associated with the pavilion structures shall be minimized by directing light downward and utilizing full cut-off fixtures, shields, or recessed fixtures.

MM-2 *Prior to approval of each project phase, building plans and elevations shall be submitted for review and approval consistent with the following conditions:*

a. No highly reflective glazing or coatings shall be used on roofing materials.

b. No highly reflective exterior finishes such as chrome, bright stainless steel or glossy tile shall be used on the south and west facing sides of the development where visible from off-site locations.

c. No highly reflective glazing or coatings shall be used on west and south facing windows.

Residual Impacts

Implementation of these measures would minimize potential glare and lighting trespass impacts as seen from the surrounding area. As a result, visual impacts based on new source of light or glare would be considered significant but mitigable (CEQA, Class II).

8.5 Cumulative Impacts

The discussion of cumulative impacts relates to the potential for the project to contribute to an aggregate change in visual quality from the surrounding public viewing areas, taking into consideration existing as well as proposed development.

The Cal Poly campus continues to grow and evolve according to its mission and goals and as described in the adopted Campus Master Plan (2001). New student housing , sports, and agricultural learning facilities have been constructed in the last several years and can be seen in the visual context of the project. Also, the University's Master Plan 2030 update (currently in process) anticipates substantial future growth throughout the campus, much of which may be visible from off-campus public viewpoints. In addition the Chorro Valley in general has undergone some amount of visual change over the last several years. The development of residential lots in the Paso de Caballo area, expansion of Cuesta College, the Sheriff's Facility, Animal Services, the shooting range, and Wood's Humane Society are all visible along the Highway 1 corridor.

The project's low noticeability reduces its potential to alter the aesthetic character of the area. Although the project could play a role in a public perception that the region is undergoing a change in visual character, the project's contribution to that perception would be minor and less than significant (CEQA Class III).

Impact 5 **The project's low noticeability reduces its potential to alter the aesthetic character of the area. Although the project could play a role in a public perception that the region is undergoing a change in visual character, the project's contribution to that perception would be minor and less than significant (CEQA Class III).**

Figure 5. Key Viewing Area 1 – Existing View from Bishop Peak

Figure 6. Key Viewing Area 1 – Photo-Simulation of the Proposed Project from Bishop Peak

Figure 7. Key Viewing Area 2 – Existing View from Highway 1

Figure 8. Key Viewing Area 2 – Photo-Simulation of the Proposed Project from Highway 1

9 REFERENCES

City of San Luis Obispo General Plan, Chapter 2 - Circulation Element, 2014.

City of San Luis Obispo General Plan, Chapter 2 - Chapter 6 - Conservation and Open Space Element, 2014.

The California State University CEQA Handbook, California State University.

Cal Poly San Luis Obispo Campus Land Use and Design Guidelines, California State University, 2010.

Cal Poly Master Plan and Environmental Impact Report, California State University, 2001.

County of San Luis Obispo Land Use and Circulation Elements (Part 2) "The Area Plans", Section IV. San Luis Obispo Area Plan, February 2014.

County of San Luis Obispo General Plan Conservation and Open Space Element, May 2010.

San Luis Obispo County Code - Title 22, Land Use Ordinance, 2014.

"2014 Traffic Volumes on California State Highways", California State Transportation Agency, 2014.

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APPENDIX B. AIR QUALITY AND GREENHOUSE GAS IMPACT ASSESSMENT

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AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR THE PROPOSED

CAL POLY OPPENHEIMER EQUESTRIAN PAVILIONS FACILITY DEVELOPMENT PROGRAM PROJECT

SAN LUIS OBISPO, CA

JANUARY 2017

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LIST OF COMMON TERMS & ACRONYMS

AAM	Annual Arithmetic Mean
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DPM	Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM
FCAA	Federal Clean Air Act
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutant
LOS	Level of Service
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards or National AAQS
NESHAPs	National Emission Standards for HAPs
NO_x	Oxides of Nitrogen
OAP	Ozone Attainment Plan
O_3	Ozone
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate Matter (less than 10 μm)
$PM_{2.5}$	Particulate Matter (less than 2.5 μm)
ppb	Parts per Billion
ppm	Parts per Million
ROG	Reactive Organic Gases
SIP	State Implementation Plan
SLOAPCD	San Luis Obispo County Air Pollution Control District
SO_2	Sulfur Dioxide
SCCAB	South Central Coast Air Basin
TAC	Toxic Air Contaminant
$\mu g/m^3$	Micrograms per cubic meter
U.S. EPA	United State Environmental Protection Agency

INTRODUCTION

This report provides an analysis of air quality and GHG impacts associated with the proposed Oppenheimer Equestrian Pavilions Facility Project (project). This report also provides a summary of existing conditions in the project area and the applicable regulatory framework pertaining to air quality and climate change.

PROPOSED PROJECT SUMMARY

The project proposes improvements to the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. Proposed project components include demolition of existing structures, upgrades to existing structures, as well as the development of new facilities. The project also includes associated improvements such as utilities, detention basins for surface water control, landscaping, and access roads for circulation. The project consists of four project phases: Phase 1 (Equestrian Pavilion, Foaling Barn, Stallion Barn), Phase 2 (Equestrian Pavilion, Animal Health Center, New Storage Building), Phase 3 (Agriculture Event Center), and Phase 4 (Crop Sciences). Phases 1, 2, and 3 are generally located in the northern extent of the campus, within the areas defined in the Master Plan as the "Equine Unit", "Environmental Horticulture", and "Agriculture Pavilion". Phase 4 encompasses approximately 7 acres generally located adjacent to and north of Highland Drive southwest of Mount Bishop Road. The project components are depicted in Figure 1. Proposed project components for Phase 1, 2, and 3 are depicted in Figure 1. The location of Phase IV is depicted in Figure 2.

AIR QUALITY

SETTING

The project is located in the City of San Luis Obispo, within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the SLOAPCD. Air quality in the SCCAB is influenced by a variety of factors, including topography, local and regional meteorology.

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001).

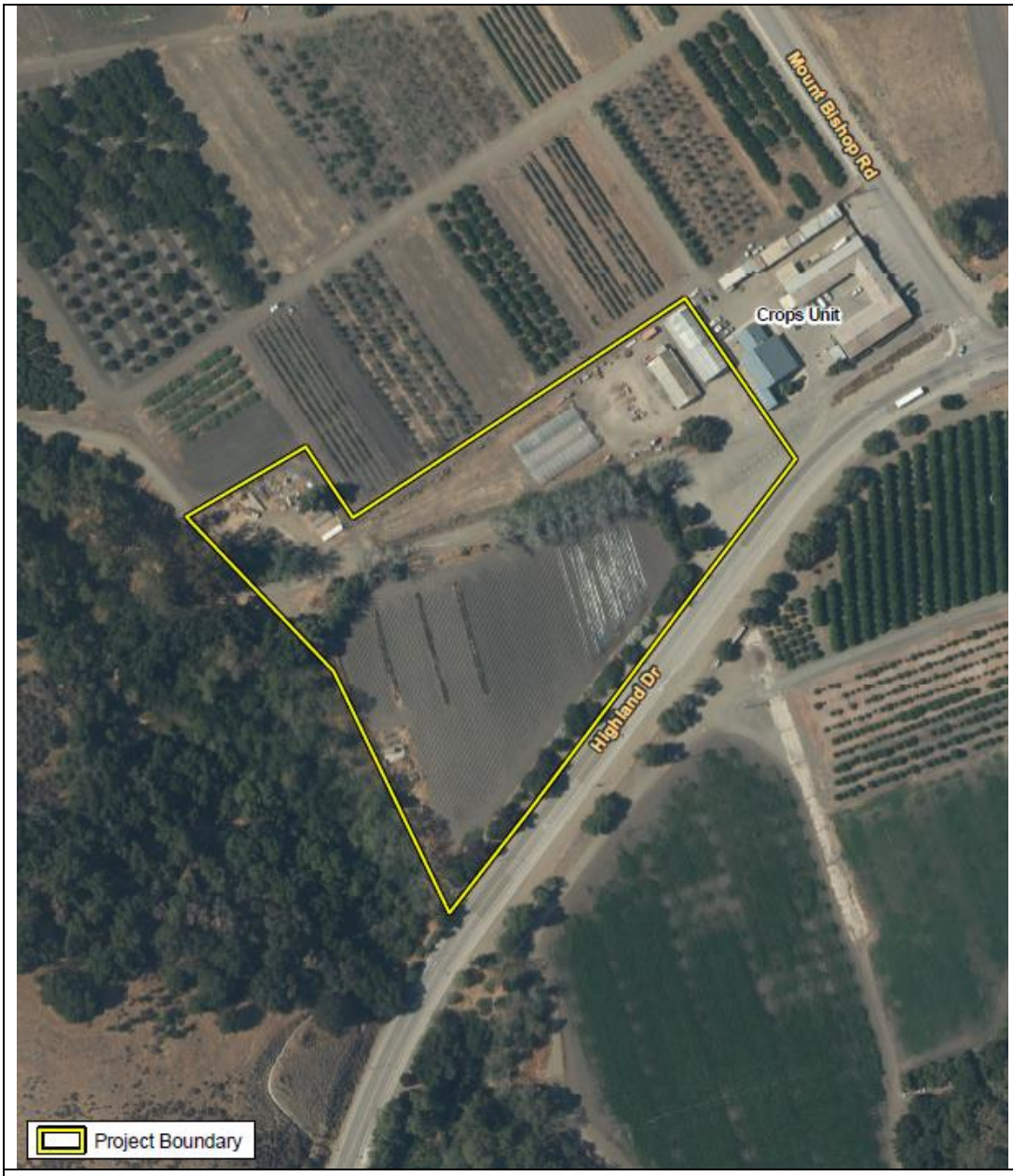
Regional meteorology is largely dominated by a persistent high pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001).

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001).

Figure 1
Proposed Project Site Plan (Phase 1-3)

Image Source: SWCA 2016, Populous 2016
Not to scale. All locations and boundaries are approximate.

Figure 2
Plant Sciences Complex Project Area (Phase 4)



Not to Scale.

Source: SWCA 2016

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001).

In the Fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, "trapping" pollutants near the surface (SLOAPCD 2001).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the "post Santa Ana" condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county (SLOAPCD 2001).

Atmospheric Stability and Dispersion

Air pollutant concentrations are primarily determined by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange, or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions (SLOAPCD 2001).

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition, termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating (SLOAPCD 2001).

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses. During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating (SLOAPCD 2001).

In contrast, in the summertime the presence of the Pacific high pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1000 to 2500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001).

CRITERIA AIR POLLUTANTS

For the protection of public health and welfare, the Clean Air Act (CAA) required that the United States Environmental Protection Agency (U.S. EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the US EPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air without harm to the public's health. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. The CAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

Human Health & Welfare Effects

Common air pollutants and associated adverse health and welfare effects are summarized in Table 1. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone, particulate matter (PM) and carbon monoxide (CO). As depicted in Table 1, exposure to increased pollutant concentrations of ozone, PM and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Table 1
Common Pollutants & Adverse Effects

Pollutant	Human Health & Welfare Effects
Particulate Matter (PM_{10} & $PM_{2.5}$)	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Ozone (O_3)	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Sulfur Dioxide (SO_2)	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: ARB 2015b

ODORS

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e. irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SLOAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SLOAPCD's Rule 204, Nuisance. Any actions related to odors would be based on citizen complaints

to local governments and the SLOAPCD. The SLOAPCD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine if the Project results in excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 41700, air quality public nuisance.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the Federal Clean Air Act (FCAA) or the California Clean Air Act (CCAA), and are thus not subject to National or State AAQS. TACs are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and ARB regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national levels, the U.S. EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

At the state level, the ARB has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, Diesel-exhaust particulate matter (DPM) was added to the ARB list of TACs. DPM is the primary TACs of concern for mobile sources. Of all controlled TACs, emissions of DPM are estimated to be responsible for about 70 percent of the total ambient TAC risk. The ARB has made the reduction of the public's exposure to DPM one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (ARB 2005).

At the local level, air districts have the authority over stationary or industrial sources. All projects that require air quality permits from the SLOAPCD are evaluated for TAC emissions. The SLOAPCD limits emissions and public exposure to TACs through a number of programs. The SLOAPCD prioritizes TAC-emitting stationary sources, based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. The SLOAPCD requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to AB 2588. No major existing sources of TACs have been identified in the project area.

Land Use Compatibility with TAC Emission Sources

The ARB published an informational guide entitled: *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) in 2005. The purpose of this guide is to provide information to aid local jurisdictions in addressing issues and concerns related to the placement of sensitive land uses near major sources of air pollution. The CARB's Handbook includes recommended separation distances for various land uses that are based on relatively conservative estimations of emissions based on source-specific information. However, these recommendations are not site specific and should not be interpreted as defined "buffer zones". It is also important to note that the recommendations of the Handbook are advisory and need to be balanced with other State and local policies (ARB 2005). Depending on site and project-specific conditions, an assessment of potential increases in

exposure to TACs may be warranted for proposed development projects located within the distances identified. CARB-recommended separation distances for various sources of emissions are summarized in Table 2.

Table 2
Recommendations on Siting New Sensitive Land Uses
Near Air Pollutant Sources

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service/maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perchloroethylene dry cleaners.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Recommendations are advisory, are not site specific, and may not fully account for future reductions in emissions, including those resulting from compliance with existing/future regulatory requirements.
Source: ARB 2005

ASBESTOS

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos, which was identified as a TAC in 1986 by CARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is located within an area identified as having a potential for naturally-occurring ultramafic rock and serpentine soils.

Asbestos-containing material (ACM) may be present in existing structures. The demolition or renovation of existing structures may be subject to regulatory requirements for the control of ACM. A summary of applicable regulatory requirements is included in Appendix A.

REGULATORY FRAMEWORK

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, CARB, and the SLOAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation.

FEDERAL

U.S. Environmental Protection Agency

At the federal level, the U.S. EPA has been charged with implementing national air quality programs. The U.S. EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

Federal Clean Air Act

The FCAA required the US EPA to establish National Ambient Air Quality Standards (NAAQS or National AAQS), and also sets deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table 3.

STATE

California Air Resources Board

The ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act of 1988. Other ARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts, establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The CAAQS are summarized in Table 3. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel and engine used.

California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for Ozone, CO, SO_2, and NO_2 by the earliest practical date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

Assembly Bills 1807 & 2588 - Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, the Air Resources Board (ARB) adopted a regulation to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, as well as two-engine vehicles that drive on road, with the limited exception of two-engine sweepers. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, airport ground support equipment, water well drilling rigs, and two-engine cranes. Such vehicles are used in construction, mining, and industrial operations. The regulation

Table 3
Summary of Ambient Air Quality Standards & Attainment Designations

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary[a]	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm	Non-Attainment	–	Non-Attainment Eastern SLO County -Attainment Western SLO County
	8-hour	0.070 ppm		0.075 ppm	
Particulate Matter (PM_{10})	AAM	20 µg/m3	Non-Attainment	–	Unclassified/ Attainment
	24-hour	50 µg/m3		150 µg/m3	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m3	Attainment	12 µg/m3	Unclassified/ Attainment
	24-hour	No Standard		35 µg/m3	
Carbon Monoxide (CO)	1-hour	20 ppm	Attainment	35 ppm	Attainment/ Maintenance
	8-hour	9 ppm		9 ppm	
	8-hour (Lake Tahoe)	6 ppm		–	
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	0.053 ppm	Unclassified
	1-hour	0.18 ppm		100 ppm	
Sulfur Dioxide (SO_2)	AAM	–	Attainment	0.03 ppm	Unclassified
	24-hour	0.04 ppm		0.14 ppm	
	3-hour	–		0.5 ppm (1300 µg/m3)**	
	1-hour	0.25 ppm		75 ppb	
Lead	30-day Average	1.5 µg/m3	Attainment	–	No Attainment Information
	Calendar Quarter	–		1.5 µg/m3	
	Rolling 3-Month Average	–		0.15 µg/m3	
Sulfates	24-hour	25 µg/m3	Attainment	No Federal Standards	
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m3)	Attainment		
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m3)	No Information Available		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/kilometer-visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.	Attainment		

** For more information on standards visit :http//ww.arb.ca.gov.research/aaqs/aaqs2.pdf*
*** Secondary Standard*
Source: SLOAPCD 2016; ARB 2016a

does not apply to stationary equipment or portable equipment such as generators. The off-road vehicle regulation, establishes emissions performance requirements, establishes reporting, disclosure, and labeling requirements for off-road vehicles, and limits unnecessary idling.

LOCAL

County of San Luis Obispo Air Pollution Control District

The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the region are maintained. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

IMPACT ANALYSIS

Air quality impacts attributable to the proposed project are summarized in Table 4.

Table 4
Summary of Project-Related Air Quality Impacts

Air Quality Impacts	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Would the project conflict with or obstruct implementation of the applicable air quality plan?	☐	■	☐	☐
B) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	■	☐	☐
C) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	■	☐	☐
D) Would the project expose sensitive receptors to substantial pollutant concentrations?	☐	■	☐	☐
E) Would the project create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

METHODOLOGY

Short-term Impacts

Emissions associated with construction of proposed project were calculated using the CalEEMod, version 2016.3.1, computer program. Construction of the proposed project is anticipated to occur in four phases beginning in 2017. Overall construction phase durations, building areas to be demolished, new buildings and paved/unpaved parking areas to be constructed were based on project-specific information. The proposed project would not require the import/export of soil. Detailed construction information, including construction equipment use, vehicle trips, equipment load factors and emission factors were not available at the time of the analysis and were based on default parameters contained in the model.

Long-term Impacts

Long-term operational emissions of criteria air pollutants associated with the proposed project were calculated using the CalEEMod, version 2016.3.1, computer program. The CalEEMod program includes quantification of emissions from various emission sources, including energy use, area sources, and motor vehicle trips. Emissions were quantified

for each of the proposed development phases and for project buildout conditions. Trip generation rates used in the emissions modeling were derived from the traffic analysis prepared for this project. Localized air quality impacts were qualitatively assessed.

THRESHOLDS OF SIGNIFICANCE

To assist in the evaluation of air quality impacts, the SLOAPCD has developed recommended significance thresholds, which are contained in the SLOAPCD's *CEQA Air Quality Handbook* (2012). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SLOAPCD thresholds are exceeded:

Construction Impacts

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in Table 5 and discussed, as follows (SLOAPCD 2012):

Table 5
SLOAPCD Thresholds of Significance for Construction Impacts

Pollutant	Threshold (1)		
	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)
Ozone Precursors (ROG + NO_X)(2)	137	2.5	6.3
Diesel Particulate Matter (DPM)(2)	7	0.13	0.32
Fugitive Particulate Matter (PM_{10}), Dust	None	2.5	None

1. Daily and quarterly emissions thresholds are based on the California Health & Safety Code and the ARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5 tons PM_{10} quarterly threshold.

ROG and NOx Emissions

- Daily: For construction projects expected to be completed in less than one quarter (90 days), exceedance of the 137 lb/day threshold requires Standard Mitigation Measures;
- Quarterly – Tier 1: For construction projects lasting more than one quarter, exceedance of the 2.5 ton/qtr threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. If implementation of the Standard Mitigation and BACT measures cannot bring the project below the threshold, off-site mitigation may be necessary; and,
- Quarterly – Tier 2: For construction projects lasting more than one quarter, exceedance of the 6.3 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

Diesel Particulate Matter (DPM) Emissions

- Daily: For construction projects expected to be completed in less than one quarter, exceedance of the 7 lb/day threshold requires Standard Mitigation Measures;
- Quarterly - Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13 tons/quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and,
- Quarterly - Tier 2: For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM_{10}), Dust Emissions

- Quarterly: Exceedance of the 2.5 ton/qtr threshold requires Fugitive PM_{10} Mitigation Measures and may require the implementation of a CAMP.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in Table 6.

Table 6
SLOAPCD Thresholds of Significance for Operational Impacts

Pollutant	Threshold (1)	
	Daily (lbs/day)	Annual (tons/year)
Ozone Precursors (ROG + NO_X)(2)	25	25
Diesel Particulate Matter (DPM)(2)	1.25	None
Fugitive Particulate Matter (PM_{10}), Dust	25	25
CO	550	None

1. Daily and annual emissions thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the ARB Carl Moyer Guidelines for DPM.
2. CalEEMod – use winter operational emission data to compare to operational thresholds.

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants, or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at a very low level of emissions. For the evaluation of such projects, the SLOAPCD recommends the use of the following thresholds:

- Type A Projects: new proposed land use projects that generate toxic air contaminants (such as gasoline stations, distribution facilities or asphalt batch plants) that impact sensitive receptors. Air districts across California are uniform in their recommendation to use the significance thresholds that have been established under each district's "Hot Spots" and permitting programs. The SLOAPCD has defined the excess cancer risk significance threshold at 10 in a million for Type A projects in SLO County; and,
- Type B Projects: new land use projects that will place sensitive receptors (e.g., residential units) in close proximity to existing toxics sources (e.g., freeway). The SLOAPCD has established a CEQA health risk threshold of 89 in-a-million for the analysis of projects proposed in close proximity to toxic sources. This value represents the population weighted average health risk caused by ambient background concentrations of toxic air contaminants in San Luis Obispo County. The SLOAPCD recommends Health Risk screening and, if necessary, Health Risk Assessment (HRA) for any residential or sensitive receptor development proposed in proximity to toxic sources.

Localized CO Concentrations

Localized CO concentrations associated with the proposed project would be considered less-than-significant impact if: (1) Traffic generated by the proposed project would not result in deterioration of intersection level of service (LOS) to LOS E or F; or (2) the project would not contribute additional traffic to an intersection that already operates at LOS of E or F (Caltrans 1996).

Odors

Screening of potential odor impacts is typically recommended for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

If the proposed project would locate receptors and known odor sources within one mile of each other, a full analysis of odor impacts is recommended. Known odor sources of primary concern, as identified by the SLOAPCD, include:

landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as, composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities.

PROJECT IMPACTS AND MITIGATION MEASURES

Impact AQ-A. Would the project conflict with or obstruct implementation of the applicable air quality plan?

SLOAPCD Clean Air Plan

As part of the CCAA, the SLOAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The SLOAPCD's 2001 Clean Air Plan addresses the attainment and maintenance of state and federal ambient air quality standards. The Clean Air Plan was adopted by SLOAPCD's on March 26, 2002.

The Clean Air Plan outlines the District's strategies to reduce ozone-precursor pollutants (i.e., ROG and NO_X) from a wide variety of sources. The Clean Air Plan includes a stationary-source control program, which includes control measures for permitted stationary sources; as well as, transportation and land use management strategies to reduce motor vehicle emissions and use. The stationary-source control program is administered by SLOAPCD. Transportation and land use control measures are implemented at the local or regional level, by promoting and facilitating the use of alternative transportation options, increased pedestrian access and accessibility to community services and local destinations, reductions in vehicle miles traveled, and promotion of congestion management efforts. In addition, local jurisdictions also prepare population forecasts, which are used by SLOAPCD to forecast population-related emissions and air quality attainment, including those contained in the Clean Air Plan.

According to the SLOAPCD's *CEQA Air Quality Handbook* (2012), a consistency analysis with the Clean Air Plan is required for a program-level environmental review, and may be necessary for a larger project-level environmental review, depending on the project being considered. Project-Level environmental reviews which may require a consistency analysis with the Clean Air Plan include: large residential developments and large commercial/industrial developments. For such projects, evaluation of consistency is based on a comparison of the proposed project with the land use and transportation control measures and strategies outlined in the Clean Air Plan. If the project is consistent with these measures, the project is considered consistent with the Clean Air Plan.

The proposed project is not considered a large development project that would have the potential to result in a substantial increase in population, or employment. In addition, the proposed project is also consistent with existing zoning and land use designations and would not result in the installation of any major stationary sources of emissions. In addition, as noted in Impact AQ-C, long-term daily operational emissions associated with the project, including emissions of ozone precursors, would not exceed SLOAPCD's recommended significance thresholds. For these reasons, the proposed project would not conflict with the SLOAPCD's CAP.

Particulate Matter Report – Implementation of SB 656 Requirements

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report). The PM Report identifies various measures and strategies to reduce public exposure to PM emitted from a wide variety of sources, including emissions from permitted stationary sources and fugitive sources, such as construction activities. As discussed in Impact AQ-C, uncontrolled fugitive dust generated during construction may result in localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of fugitive dust. For this reason, this impact would be considered ***potentially significant***.

Mitigation Measures

Implement Mitigation Measure AQ-1 and AQ-2.

Significance After Mitigation

Implementation of Mitigation Measure AQ-1 would include measures to reduce construction-generated emissions of fugitive dust. With mitigation, overall emissions of fugitive dust would be reduced by approximately 55 percent. These measures would also help to ensure compliance with SLOAPCD's 20-percent opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and would minimize potential nuisance impacts to nearby receptors. Mitigation Measure AQ-2 includes additional measures to reduce construction-generated emissions, including fugitive PM emissions associated with onsite demolition activities. With mitigation, this impact is considered ***less than significant***. Refer to *Impact AQ-C* and *Impact AQ-D* for additional discussion of air quality impacts and proposed mitigation measures.

Impact AQ-B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

As noted in Impact AQ-C and AQ-D, below, short-term construction activities may result in localized concentrations of pollutants that could adversely affect nearby land uses. As a result, this impact is considered ***potentially significant***. Refer to *Impact AQ-C* and *Impact AQ-D* for additional discussion of air quality impacts and proposed mitigation measures.

Mitigation Measures

Implement Mitigation Measure AQ-1 and AQ-2.

Significance After Mitigation

Implementation of Mitigation Measure AQ-1 would include measures to reduce construction-generated emissions of fugitive dust. With mitigation, overall emissions of fugitive dust would be reduced by approximately 55 percent. These measures would also help to ensure compliance with SLOAPCD's 20-percent opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and would minimize potential nuisance impacts to nearby receptors. Mitigation Measure AQ-2 includes additional measures to reduce construction-generated emissions, including fugitive PM emissions associated with onsite demolition activities. With mitigation, this impact is considered ***less than significant***. Refer to *Impact AQ-C* and *Impact AQ-D* for additional discussion of air quality impacts and proposed mitigation measures.

Impact AQ-C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Estimated daily and quarterly emissions associated with development of the proposed project phases are presented in Table 7 and Table 8, respectively, and summarized in Table 9. As depicted, construction of the proposed project would generate a maximum of approximately 73.9 lbs/day of ROG+NO_X and approximately 3.1 lbs/day of exhaust PM_{10}. Quarterly construction-generated emissions would total approximately 2.2 tons of ROG+NO_X, 0.09 tons of DPM, and 0.44 tons of Fugitive PM_{10}.

Construction-generated emissions associated with the proposed project would not exceed SLOAPCD's recommended daily or quarterly significance thresholds. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. Therefore, construction-generated particulate emissions would also be considered to have a ***potentially significant*** impact. Refer to *Impact AQ-D* for additional discussion of localized PM impacts and recommended mitigation measures.

Mitigation Measures

AQ-1: The following measures shall be implemented to minimize construction-generated emissions. These measures shall be shown on grading and building plans:

a. Reduce the amount of the disturbed area where possible.

b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.

c. All dirt stock pile areas should be sprayed daily as needed.

d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;

e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.

f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD.

g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.

i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.

j. Install wheel washers at the construction site entrance, wash off the tires or tracks of all trucks and equipment leaving the site, or implement other SLOAPCD-approved methods sufficient to minimize the track-out of soil onto paved roadways.

k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

l. The burning of vegetative material shall be prohibited.

m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.

Table 7
Daily Construction Emissions of Criteria Pollutants (Without Mitigation)

Construction Phase	Maximum Daily Emissions (lbs)	
	ROG+NO_X	Exhaust PM_{10}
Phase I	73.9	3.1
Phase II	54.9	2.2
Phase III	54.9	2.2
Phase IV	22.7	1.1
Maximum Daily Emissions	73.9	3.1
SLOAPCD Significance Thresholds	*137*	*7*
Exceed SLOAPCD Thresholds?	*No*	*No*

Maximum Daily Emissions: Assumes that facility construction, paving, and application of architectural coatings could potentially occur simultaneously on any given day. Totals may not sum due to rounding.
CAP=Criteria Air Pollutants
Refer to Appendix C for modeling assumptions and results.

Table 8
Quarterly Construction Emissions of Criteria Pollutants (Without Mitigation)

Year/Quarter	Quarterly Emissions (tons)		
		PM_{10}	
	ROG+NO_X	Dust	Exhaust
2017-Quarter 2	1.3	0.17	0.06
2017-Quarter 3	1.1	0.09	0.05
2017-Quarter 4	1.1	0.01	0.06
2018-Quarter 2	0.3	0.07	0.01
2018-Quarter 3	0.8	0.05	0.04
2018-Quarter 4	0.7	0.01	0.04
2019-Quarter 1	0.6	0.01	0.03
2019-Quarter 2	0.6	0.01	0.03
2019-Quarter 3	0.6	0.01	0.03
2019-Quarter 4	0.6	0.01	0.03
2020-Quarter 1	0.6	0.01	0.03
2020-Quarter 2	0.6	0.01	0.03
2020-Quarter 3	1.1	0.04	0.05
2020-Quarter 4	2.2	0.44	0.09
2021-Quarter 1	1.6	0.08	0.06
2021-Quarter 2	1.6	0.08	0.06
2021-Quarter 3	1.6	0.07	0.06
2021-Quarter 4	0.9	0.04	0.03
2022-Quarter 1	0.7	0.04	0.03
2022-Quarter 2	0.7	0.04	0.03
2022-Quarter 3	0.6	0.02	0.01

Table 8
Quarterly Construction Emissions of Criteria Pollutants (Without Mitigation)

Year/Quarter	Quarterly Emissions (tons)		
		PM_{10}	
	$ROG+NO_X$	Dust	Exhaust
Maximum Quarterly Emissions	2.2	0.44	0.09
SLOAPCD Significance Thresholds	*2.5*	*2.5*	*0.13*
Quarterly Emissions Exceed SLOAPCD Thresholds?	*No*	*No*	*No*

Totals may not sum due to rounding. Maximum quarterly emissions assume some construction phases may overlap. Refer to Appendix C for modeling assumptions and results.
CAP=Criteria Air Pollutants

Table 9
Summary of Construction-Generated Emissions of Criteria Pollutants (Without Mitigation)

Criteria	Project Emissions	SLOAPCD Significance Threshold	Exceed Significance Threshold?
Maximum Daily Emissions of $ROG+NO_X$	73.9 lbs/day	137 lbs/day	No
Maximum Daily Emissions of DPM	3.1 lbs/day	7 lbs/day	No
Maximum Quarterly Emissions of $ROG+NO_X$	2.2 tons/qtr	2.5 tons/qtr	No
Maximum Quarterly Emissions of DPM	0.09 tons/qtr	0.13 tons/qtr	No
Maximum Quarterly Emissions of Fugitive PM	0.44 tons/qtr	2.5 tons/qtr	No

Quarterly thresholds are based on the more conservative Tier 1 thresholds.
CAP=Criteria Air Pollutants
Refer to Appendix C for modeling assumptions and results.

Significance After Mitigation

With implementation of Mitigation Measure AQ-1,a., overall emissions of fugitive dust would be reduced by approximately 55 percent. Implementation of Mitigation Measure AQ-1,a, would also help to minimize off-site emissions associated with the disposal of construction-generated waste. These measures would also help to ensure compliance with SLOAPCD's 20-percent opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and would minimize potential nuisance impacts to nearby receptors. With mitigation, this impact would be considered ***less than significant***.

Long-term Operational Emissions

Unmitigated daily and annual operational emissions associated with the proposed project are summarized in Table 10 and Table 11, respectively. As depicted, maximum daily operational emissions at project buildout would total approximately 18.4 lbs/day ROG+NOx, 27.2 lbs/day CO, 8.2 lbs/day of fugitive PM_{10}, and 0.2 lbs/day of exhaust PM_{10}. Maximum annual emissions would total approximately 1.4 tons/year of ROG+NOx . Emissions of fugitive PM_{10} would be neglibible (<0.05 tons/year). Long-term operation of the proposed project would not generate emissions that would exceed SLOAPCD's recommended significance thresholds. This impact would be considered **less than significant**.

Table 10
Daily Operational Emissions of Criteria Pollutants (Without Mitigation)

Project Phase	Emissions (lbs/day)						
					PM_{10}		
	ROG	NO_X	ROG+NO_X	CO	Fugitive	Exhaust	Total
Phase I	0.3	0.1	0.4	0.1	0.0	0.0	0.0
Phase II	1.8	0.4	2.3	0.4	0.0	0.0	0.0
Phase III	4.4	9.4	13.8	26.4	8.2	0.1	8.3
Phase IV	1.6	0.4	2.0	0.4	0.0	0.0	0.0
Project Buildout	8.1	10.3	18.4	27.2	8.2	0.2	8.4
SLOAPCD Significance Thresholds	--	--	*25*	--	*25*	--	--
Exceeds SLOAPCD Thresholds?	--	--	*No*	--	*No*	--	--

Based on year 2019 operational conditions. Includes off-road equipment for turf maintenance, area sources, energy use, and mobile sources. Totals may not sum due to rounding.
CAP=Criteria Air Pollutants
Refer to Appendix C for modeling output files and assumptions.

Table 11
Annual Operational Emissions of Criteria Pollutants (Without Mitigation)

Source	Emissions						
					PM_{10}		
	ROG	NO_X	ROG+NO_X	CO	Fugitive	Exhaust	Total
Phase I	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Phase II	0.3	0.1	0.4	0.1	0.0	0.0	0.0
Phase III	0.4	0.1	0.5	0.1	0.0	0.0	0.0
Phase IV	0.3	0.1	0.4	0.1	0.0	0.0	0.0
Project Buildout	1.1	0.3	1.4	0.3	0.0	0.0	0.0
SLOAPCD Significance Thresholds	--	--	*25*	--	*25*	--	--
Exceeds SLOAPCD Thresholds?	--	--	*No*	--	*No*	--	--

Based on build-out year 2019 conditions. Totals may not sum due to rounding.
CAP=Criteria Air Pollutants
Refer to Appendix C for modeling output files and assumptions.

Impact AQ-D. Would the project expose sensitive receptors to substantial pollutant concentrations?

The proposed project site is location on the Cal Poly campus. Nearby sensitive receptors consist predominantly of on-campus student housing facilities. The nearest student housing facilities are located approximately 235 feet to the east of the site, adjacent to and east of Village Drive (refer to Figure 1)

Localized CO Concentrations

Localized concentrations of CO are of primary concern in areas located near congested roadway intersections. Of particular concern are signalized intersections that are projected to operate at unacceptable levels of service (LOS) E or F (Caltrans 1996).

The proposed facilities would not be anticipated to result in a substantial increase in vehicle traffic. In addition, no signalized intersections that would be primarily affected by the project were identified on the Cal Poly campus. The nearest signalized intersection likely affected by the proposed project is the intersection of Highland Drive and Santa Rosa Street. Based on traffic analysis recently prepared for the Student Housing South project, this intersection is projected to operate at LOS D, or better, under near-term and future operational conditions (Cal Poly 2013). Therefore, the proposed project would not be anticipated to result in or contribute to unacceptable levels of service (i.e., LOS E or F) at primarily affected signalized intersections. Furthermore, as previously noted, the proposed project would not result in emissions of CO in excess of the SLOAPCD's significance threshold of 550 lbs/day. This impact is considered ***less than significant***.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) has been identified as a toxic air contaminant by the ARB. In accordance with ARB Air Toxics Control Measure (ATCM), prior to any grading activities a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request form, along with a copy of the geologic report, must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.

Based on a review of the SLOAPCD's map depicting potential areas of NOA, the project site is located in an area that has been identified as having a potential for NOA (Refer to Appendix B). This impact is considered ***potentially significant***.

Asbestos-Containing Materials

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos can be found in various building products, including (but not limited to) utility pipes/pipelines (transite pipes or insulation on pipes). Asbestos containing materials could be encountered during demolition, particularly older structures constructed prior to 1970. If a project involves the disturbance or potential disturbance of ACM, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - Asbestos NESHAP). These requirements include but are not limited to: 1) notification, within at least 10 business days of activities commencing, to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM.

The proposed project includes the demolition of approximately 78,434 square feet of existing structures. As a result, demolition activities could result in the potential disturbance of ACM. This impact is considered ***potentially significant***.

Lead-Coated Materials

Demolition of structures coated with lead based paint can have potential negative air quality impacts and may adversely affect the health of nearby individuals. Improper demolition can result in the release of lead containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. Therefore, proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. Furthermore, depending on removal method, a SLOAPCD permit may be required. This impact is considered ***potentially significant***.

Localized PM Concentrations

Implementation of the proposed project would result in the generation of fugitive PM emitted during construction. Fugitive PM emissions would be primarily associated with earth-moving, demolition, and material handling activities, as well as, vehicle travel on unpaved and paved surfaces. Onsite off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM (DPM). If uncontrolled, localized concentrations of PM could

exceed air quality standards and may also result in increased nuisance impacts to nearby land uses and receptors. This impact is considered ***potentially significant***.

Mitigation Measures

AQ-2: The following measures shall be implemented to reduce expose of sensitive receptors to substantial pollutant concentrations. These measures shall be shown on grading and building plans:

a. Implement Mitigation Measure AQ-1.

b. Prior to any grading activities a geologic evaluation shall be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. These requirements may include but are not limited to:

   1. Development of an Asbestos Dust Mitigation Plan, which must be approved by the SLOAPCD prior to construction, and,

   2. Development and approval of an Asbestos Health and Safety Program (required for some projects).

c. Demolition of onsite structures shall comply with the National Emission Standards for Hazardous Air Emissions (NESHAP) requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of onsite structures, the SLOAPCD shall be notified, per NESHAP requirements. SLOAPCD notification form and reporting requirements are included in Appendix A. Additional information may be obtained at website url: http://slocleanair.org/business/asbestos.php.

d. If during demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such requirements. Contact the SLOAPCD Enforcement Division at (805) 781-5912 for more information. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition

e. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

   1) Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,

   2) Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

f. Maintain all construction equipment in proper tune in accordance with manufacturer's specifications;

g. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

h. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation;

i. Idling of all on- and off-road diesel-fueled vehicles shall not be permitted when not in use. Signs shall be posted in the designated queuing areas and or job site to remind drivers and operators of the no idling limitation.

j. Electrify equipment when possible;

k. Substitute gasoline-powered in place of diesel-powered equipment, when available; and,

l. Use alternatively fueled construction equipment on-site when available, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Significance After Mitigation

Mitigation Measure AQ-1 includes measures for the control of fugitive dust emitted during project construction, including emissions generated during the demolition of existing structures. Mitigation Measures AQ-2,b, AQ-2,c and AQ-2d have been included for the control of potentially hazardous emissions during site preparation and demolition and to ensure compliance with applicable regulatory requirements. Mitigation Measures AQ-2,e through AQ-2,l include additional provisions for reducing emissions of DPM from onsite mobile sources. With implementation of Mitigation Measure AQ-2, this impact would be considered ***less than significant***.

Impact AQ-E. Would the project create objectionable odors affecting a substantial number of people?

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source.

The proposed equestrian facilities would require the temporary storage of animal wastes. However, waste materials would not be stored for extended periods and would be promptly removed in accordance with current waste-management practices. In addition, large equestrian events are only anticipated to occur approximately 30-days per year. For these reasons, short-term construction activities and long-term operational activities would not expose a substantial number of people to frequent odorous emissions. This impact would be considered ***less than significant***.

GREENHOUSE GASES AND CLIMATE CHANGE

SETTING

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Primary GHGs attributed to global climate change, are discussed, as follows:

- **Carbon Dioxide**. Carbon dioxide (CO_2) is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (U.S. EPA 2016).

- **Methane**. Methane (CH_4) is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87% by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years (U.S. EPA 2016).

- **Nitrous Oxide**. Nitrous oxide (N_2O) is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years (U.S. EPA 2016).

- **Fluorinated Gases.** Hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (U.S. EPA 2016).

- **Black Carbon**. Black carbon has been recently identified as a major contributor to climate change. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, diesel-fueled on-road and off-road vehicles, fireplaces, agricultural waste burning, and prescribed

burning (planned burns of forest or wildlands). California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (ARB 2015a).

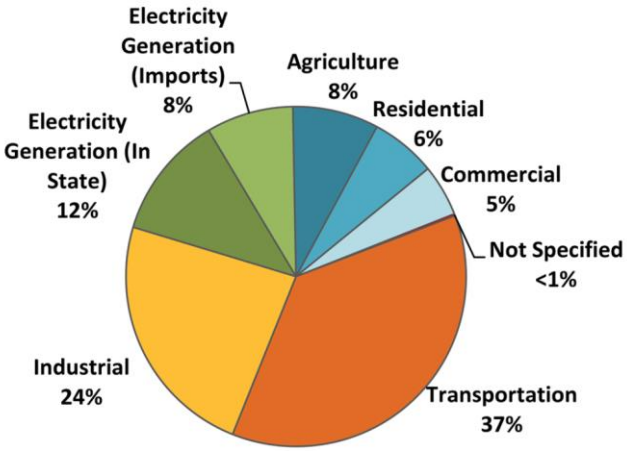
Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Gases with high global warming potential, such as HFCs, PFCs, and SF_6, are the most heat-absorbent. Over a 100-year timeframe, CH_4 traps over 28 times more heat per molecule than CO_2, and N_2O absorbs approximately 265 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted (EPA 2016).

SOURCES OF GHG EMISSIONS

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. World-wide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions (U.S. EPA 2016).

In 2014, GHG emissions within California totaled 441.5 million metric tons of carbon dioxide equivalents ($MMTCO_2e$). Within California, the transportation sector is the largest contributor, accounting for roughly 37 percent of the total state-wide GHG emissions. Emissions associated with the industrial sector are the second largest contributor, totaling approximately 24 percent. Emissions from in-state electricity generation, imported electricity, agriculture, residential, and commercial uses constitute the remaining major sources on GHG emissions. In comparison to the year 2013 emissions inventory, overall GHG emissions in California decreased by 2.8 MMTCO2e. On a per capita basis, GHG emissions in California have decreased by approximately 18 percent since 2001. The State of California GHG emissions inventory for year 2014, by main economic sector, is depicted in Figure 3.

Figure 3
State of California Greenhouse Gases Emissions Inventory by Main Economic Sector



Emissions inventory is categorized based on main economic sector, which differ slightly from the categories identified in the state's Climate Change Scoping Plan. "Not Specified" includes sources that could not be attributed to an individual sector, such as evaporative losses and emissions from use of ozone-depleting substances. Source: ARB 2016b

EFFECTS OF GLOBAL CLIMATE CHANGE

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequence of these effects on the economy.

Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snow pack is a principal supply of water for the state, providing roughly 50 percent of state's annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible exhaustion of the snowpack during spring and summer months. An earlier snowmelt would also impact the State's energy resources. Currently, approximately 20 percent of California's electricity comes from hydropower. An early exhaustion of the Sierra snowpack, may force electricity producers to switch to more costly or non-renewable forms of electricity generation during spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, resultant changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry.

REGULATORY FRAMEWORK

FEDERAL

INTERNATIONAL REGULATION AND THE KYOTO PROTOCOL

The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC). While the United States signed the Kyoto Protocol, which would have required reductions in GHGs, Congress never ratified the protocol. The federal government chose voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science. In 2002, the United States announced a strategy to reduce the greenhouse gas intensity of the American economy by 18 percent over a 10-year period from 2002 to 2012.

As part of the commitments to the UNFCCC, the U.S. EPA has developed an inventory of anthropogenic emissions by sources and removals by sinks of all GHGs. This inventory is periodically updated, with the latest update in 2010. The U.S. EPA reports that total US emissions rose by 14 percent from 1990 to 2007, while the US gross domestic product increased by 59 percent over the same period. A 2.9 percent decrease in emissions was noted from 2007 to 2008, which is reported to be attributable to climate conditions, reduced use of petroleum products for transportation, and increased use of natural gas over other fuel sources. The inventory notes that the transportation sector emits about 32 percent of CO_2 emissions, with 53 percent of those emissions coming from personal automobile use. Residential uses, primarily from energy use, accounted for 21 percent of CO_2 emissions (U.S. EPA 2010).

As a part of the U.S. EPA's responsibility to develop and update an inventory of US greenhouse gas emissions and sinks, the U.S. EPA compared trends of other various US data. Over the period between 1990 and 2008, GHG emissions grew at an average rate of about 0.7 percent per year. Population growth was slightly higher at 1.1 percent, while energy and fossil fuel consumption grew at 0.9 and 0.8 percent, respectively. Gross domestic product and energy generation grew at much higher rates.

Executive Order 13514

Executive Order 13514 is focused on reducing GHGs internally in federal agency missions, programs and operations, but also direct federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change (Caltrans 2016).

On April 2, 2007, in Massachusetts v. U.S. EPA, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act and that the U.S. EPA has the authority to regulate GHG. The Court held that the U.S. EPA Administrator must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision (Caltrans 2016).

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles, which was published on September 15, 2009. On May 7, 2010 the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards was published in the Federal Register.

U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.

The final combined U.S. EPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, (the equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements). Together, these standards will cut GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). On August 28, 2012, U.S. EPA and NHTSA issued their joint rule to extend this national program of coordinated greenhouse gas and fuel economy standards to model years 2017 through 2025 passenger vehicles (Caltrans 2016).

STATE

Assembly Bill 1493

Assembly Bill (AB) 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the California Air Resources Board (ARB) to develop and adopt the nation's first GHG emission standards for automobiles. These standards are also known as Pavley I. The California Legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a reduction in the state's water supply, an increase in air pollution caused by higher temperatures, harm to agriculture, an increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the State is authorized to do under the Clean Air Act, to allow the State to require reduced tailpipe emissions of CO_2. In late 2007, the U.S. EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the State brought suit against the U.S. EPA related to this denial.

In January 2009, President Obama instructed the U.S. EPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the U.S. EPA granted California's waiver request, enabling the State to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

Also in 2009, President Obama announced a national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the US. The new standards would cover model years 2012 to 2016 and would raise passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon by 2016. When the national program takes effect, California has committed to allowing automakers who show compliance with the national program to also be deemed in compliance with state requirements. California is committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from the 2020 model year vehicles.

Executive Order No. S-3-05

EO S-3-05 proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

EO No. S-3-05 directed the secretary of the California Environmental Protection Agency to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

Executive Order No. S-01-07

EO S-1-07, the Low Carbon Fuel Standard (LCFS) was issued on January 18, 2007 and called for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. This order instructed the CalEPA to coordinate activities between the University of California, the California Energy Commission (CEC) and other state agencies to develop and propose a draft compliance schedule to meet the 2020 target. Furthermore, it directed ARB to consider initiating a regulatory proceedings to establish and implement the LCFS. In response, ARB adopted the LCFS regulation in 2010.

Assembly Bill 32 - California Global Warming Solutions Act of 2006

AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride, and sulfur hexafluoride. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Climate Change Scoping Plan

In October 2008, ARB published its *Climate Change Proposed Scoping Plan*, which is the State's plan to achieve GHG reductions in California required by AB 32. This initial Scoping Plan contained the main strategies to be implemented in order to achieve the target emission levels identified in AB 32. The Scoping Plan included ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementation of the Low Carbon Fuel Standard program, energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems, and a renewable portfolio standard for electricity production.

A key component of the Scoping Plan is the Renewable Portfolio Standard, which is intended to increase the percentage of renewables in California's electricity mix to 33 percent by year 2020, resulting in a reduction of 21.3 $MMTCO_2e$. Sources of renewable energy include, but are not limited to, biomass, wind, solar, geothermal, hydroelectric, and anaerobic digestion. Increasing the use of renewables will decrease California's reliance on fossil fuels, thus reducing GHG emissions.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. With regard to land use planning, the Scoping Plan expects approximately 5.0 $MMTCO_2e$ will be achieved associated with implementation of Senate Bill 375, which is discussed further below.

The initial Scoping Plan was first approved by ARB on December 11, 2008 and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reaching the 2050 goals. ARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in SB 32 and EO B-30-15.

Senate Bill 1368

Senate Bill (SB) 1368 (codified at Public Utilities Code Chapter 3) is the companion bill of AB 32. SB 1368 required the California Public Utilities Commission (CPUC) to establish a greenhouse gas emissions performance standard for baseload generation from investor-owned utilities by February 1, 2007. The bill also required the California Energy Commission (CEC) to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural-gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and the CEC.

Senate Bill 1078 and Governor's Order S-14-08 (California Renewables Portfolio Standards)

SB 1078 (Public Utilities Code Sections 387, 390.1, 399.25 and Article 16) addresses electricity supply and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide a minimum 20 percent of their supply from renewable sources by 2017. This Senate Bill will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order S-14-08, which set the Renewables Portfolio Standard target to 33 percent by 2020. It directed state government agencies and retail sellers of electricity to take all appropriate actions to implement this target. Executive Order S-14-08 was later superseded by Executive Order S-21-09 on September 15, 2009. Executive Order S-21-09 directed ARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. This Executive Order was superseded by statute SB X1-2 in 2011, which obligates all California electricity providers, including investor-owned utilities and publicly owned utilities, to obtain at least 33 percent of their energy from renewable electrical generation facilities by 2020, with interim targets of 20 percent by 2013 and 25 percent by 2016.

ARB is required by current law, AB 32 of 2006, to regulate sources of GHGs to meet a state goal of reducing greenhouse gas emissions to 1990 levels by 2020 and an 80 percent reduction of 1990 levels by 2050. The CEC and CPUC serve in advisory roles to help ARB develop the regulations to administer the 33 percent by 2020 requirement. ARB is also authorized to increase the target and accelerate and expand the time frame.

Mandatory Reporting of Greenhouse Gas Emissions

Reporting of GHGs by major sources is required by the California Global Warming Solutions Act (AB 32, 2006). Revisions to the existing ARB mandatory GHG reporting regulation were considered at the board hearing on December 16, 2010. The revised regulation was approved by the California Office of Administrative Law and became effective on January 1, 2012. The revised regulation affects industrial facilities, suppliers of transportation fuels, natural gas, natural gas liquids, liquefied petroleum gas, and carbon dioxide, operators of petroleum and natural gas systems, and electricity retail providers and marketers.

Cap-and-Trade Regulation

The cap-and-trade regulation is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's greenhouse gas emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013 and apply to large electric power plants and large industrial plants. In 2015, they will extend to fuel distributors (including distributors of heating and transportation fuels). At that stage, the program will encompass around 360 businesses throughout California and nearly 85 percent of the state's total greenhouse gas emissions.

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions, and are free to buy and sell allowances on the open market. California held its first auction of greenhouse gas allowances on November 14, 2012. California's GHG cap-and-trade system will reduce GHG emissions from regulated entities by approximately 16 percent, or more, by 2020.

California Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

Green Building Standards

In essence, green buildings standards are indistinguishable from any other building standards. Both are contained in the California Building Code and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

AB 32, which mandates the reduction in greenhouse gas emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, ARB estimated that green building standards would reduce GHG emissions by approximately 26 million metric tons of CO_2e ($MMTCO_2e$) by 2020.

The green buildings standards, commonly referred to as CalGreen standards, were most recently updated in 2013. The 2013 building energy efficiency standards are 25 percent more efficient than previous standards for residential construction and 30 percent more efficient for non-residential construction (CEC 2015).

Senate Bill 32

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40 percent below 1990 levels by 2030 is intended to promote further GHG-reductions in support of the State's ultimate goal of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32 also directs the ARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target.

Senate Bill 375 (Sustainable Communities and Climate Protection Act)

SB 375 supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of developing more sustainable communities. Under SB 375, ARB sets regional targets for GHG emissions reductions associated with passenger vehicle use. Each of California's metropolitan planning organizations must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the identified GHG-reduction strategies.

CAL POLY CLIMATE ACTION PLAN

California AB32, the Global Warming Solutions Act of 2006, set groundbreaking goals for the state to reduce greenhouse gas emissions to 1990 levels by 2020, and 80% below 1990 levels by 2050. The CSU chose to go beyond state mandates in its 2014 Sustainability Policy, aiming to reduce GHG emissions to 80% below 1990 levels by 2040 – ten years ahead of the state goal. Greenhouse gas emissions are broken down into three categories:

- Scope 1 – Direct on-site emissions (combustion of fossil fuel, fleet vehicles, ag ops, refrigerants)
- Scope 2 – Emissions from purchased utilities (electricity, water)
- Scope 3 – Emissions not under direct control (commuting, business travel, waste water, solid waste)

The Cal Poly Climate Action Plan (PolyCAP) was prepared in 2015-2016. The GHG inventory contained in the PolyCAP showed that Cal Poly has already reduced its Scope 1, 2, and 3 emissions below 1990 levels, five years before the CSU policy mandate. The inventory also showed that over 50% of Cal Poly's emissions are produced by commuting (Cal Poly 2017).

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

The SLOAPCD is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by federal and state regulatory requirements.

GHG Significance Thresholds

The SLOAPCD has adopted recommended GHG significance thresholds. These thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in ARB's Scoping Plan. The GHG significance thresholds include one qualitative threshold and two quantitative thresholds options for evaluation of operational GHG emissions. The qualitative threshold option is based on a consistency analysis in comparison to a Qualified Greenhouse Gas Reduction Strategy, or equitably similar adopted policies, ordinances and programs. If a project complies with a Qualified Greenhouse Gas Reduction Strategy that is specifically applicable to the project, then the project would be considered to have a less-than-significant impact. In this instance, the City's CAP is considered a Qualified Greenhouse Gas Reduction Strategy. The two quantitative threshold options include: 1) a bright-line threshold of 1,150 $MTCO_2e$/year; and 2) an efficiency threshold of 4.9 $MTCO_2e$/service population (residents+employees)/year. An additional GHG significance threshold of 10,000 $MTCO_2e$/year is proposed for industrial stationary sources. The applicable GHG significance threshold to be used

would depend on the type of project being proposed. Projects with GHG emissions that do not exceed the selected threshold would be considered to have a less-than-significant impact and would not conflict with applicable GHG-reduction plans, policies, or regulations. The SLOAPCD's GHG emission thresholds are summarized in Table 12.

Table 12
SLOAPCD Greenhouse Gas Thresholds of Significance

Project	Threshold
Projects other than Stationary Sources	1. Compliance with Qualified GHG Reduction Strategy (i.e., Climate Action Plan); or 2. 1,150 MT CO_2e/year; or 3. 4.9 MT CO_2e/SP/year (residents+employees)
Stationary Sources (Industrial)	10,000 MT CO_2e/year
Construction	Amortized over the project life and added to operation GHG emissions
Source: SLOAPCD 2012	

IMPACT ANALYSIS

GHG impacts attributable to the proposed project are summarized in Table 13.

Table 13
Summary of Project-Related Greenhouse Gas Emissions Impacts

GHG Impacts	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	■	☐	☐
B) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	■	☐	☐

METHODOLOGY

GHG emissions were quantified using the CalEEMod computer model. Mobile-source emissions were quantified based on trip-generation rates derived from the traffic analysis prepared for this project. Emissions associated with area sources, water use and conveyance, waste generation, and energy use were based largely on default assumptions identified in the CalEEMod computer model. Energy use intensity factors for future years were adjusted to account for implementation of California's Renewable Portfolio Standards, which requires California electricity providers to obtain at least 33 percent of their energy from renewable electrical generation facilities by 2020. Modeling assumptions and output files are included in Appendix C of this report.

THRESHOLDS OF SIGNIFICANCE

In accordance with SLOAPCD recommended significance thresholds, the proposed project would be considered to have a potentially significant impact on the environment if project-generated emissions would exceed 1,150 $MTCO_2e$/year. Projects that exceed 1,150 $MTCO_2e$/year would be considered to have a potentially significant impact on the environment, which may also conflict with GHG-reduction planning efforts.

Impact GHG-A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Short-term Construction GHG Emissions

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in Table 14. Based on the modeling conducted, annual GHG emissions associated with construction of the proposed project would range from approximately 292.4 to 524.4 $MTCO_2e$. In total, project construction would generate roughly 1,422 $MTCO_2e$. Amortized GHG emissions, when averaged over the assumed 25-year life of the project, would total approximately 56.88 $MTCO_2e$/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted.

Table 14
Construction GHG Emissions (Without Mitigation)

Project Phase	GHG Emissions ($MTCO_2e$/Year)
Phase I	300.1
Phase II	305.1
Phase III	524.4
Phase IV	292.4
Construction Total	1,422.0
Amortized Net Change in Construction Emissions	56.88

Amortized emissions are quantified based on an estimated 25-year project life.
Refer to Appendix C for modeling assumptions and results.

Long-term Operational GHG Emissions

Estimated long-term increases in GHG emissions associated with the proposed project are summarized in Tables 15. At buildout year 2013, annual operational GHG emissions would total approximately 1,188.7 $MTCO_2e$/year. With the inclusion of amortized construction emissions, operational GHG emissions would total approximately 1,245.6 $MTCO_2e$/year at buildout year 2023 and approximately 1,093.6 $MTCO_2e$ by year 2030. GHG emissions are projected to decrease in future years due largely to improvements in vehicle emissions and the increased use of renewable energy sources. As depicted in Table 15, estimated GHG emissions for buildout year 2023 would exceed SLOAPCD's significance threshold of 1,150 $MTCO_2e$/year. As a result, this impact is considered ***potentially significant***.

Table 15
Operational GHG Emissions (Without Mitigation)

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)
Year 2020 (Phase I)	
Area Source[1]	0.0
Energy Use[2]	31.3
Motor Vehicles	0.0
Waste Generation	5.9
Water Use and Conveyance	5.6
Total	42.8
Total with Amortized Construction Emissions	99.6
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	No
Buildout Year 2023 (Phases I-IV)	
Area Source[1]	0.0
Energy Use[2]	753.4
Motor Vehicles	116.1
Waste Generation	188.0
Water Use and Conveyance	131.3
Total	1,188.7
Total with Amortized Construction Emissions	**1,245.6**
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	**Yes**
Year 2030 (Phases I-IV)	
Area Source[1]	0.0
Energy Use[2]	639.5
Motor Vehicles	93.7
Waste Generation	188.0
Water Use and Conveyance	115.4
Total	1,036.7
Total with Amortized Construction Emissions	1,093.6
SLOAPCD Significance Threshold	1,150
Exceeds Significance Threshold?	No

1. Area source includes emissions associated with the application of architectural coatings, use of consumer products/agricultural products, and landscape maintenance.

2. Includes adjustment for California Renewable Portfolio Standards requirements.

Refer to Appendix C *for modeling assumptions and results.*

Mitigation Measure

GHG-1: The following measures shall be implemented to reduce GHG emissions associated with project construction and operation. These measures shall be shown on grading and building plans:

a. Implement Mitigation Measures AQ-2,e through AQ-2,l.

b. Divert 65 percent of non-hazardous construction or demolition debris for recycling/reuse.

c. Install low-flow water fixtures and other water conservation measures sufficient to meet, at a minimum, CALGreen Tier 1 standards for water efficiency and conservation.

d. To the extent locally available, utilize pre-finished building materials or materials that do not require the application of architectural coatings.

e. Install energy-efficient appliances and building components sufficient to achieve overall reductions in interior energy use beyond those required at the time of development by CalGreen standards.

f. Install roofing material with a solar reflectance values meeting the EPA/DOE Energy Star rating to reduce summer cooling needs.

g. Utilize high efficiency lights in parking lots, streets, and other public areas.

h. New buildings shall be designed to meet LEED Gold standards.

i. New buildings shall be designed to accommodate rooftop solar photovoltaic systems.

j. Onsite animal manure should, to the extent possible, be diverted to generate energy.

k. Plant drought tolerate landscaping and incorporate water-efficient irrigation systems where necessary.

l. Provide onsite facilities for the collection of recyclable materials.

m. Provide a designated parking space for alternatively fueled, carpool, or vanpool vehicles.

n. The project site shall be designed to minimize barriers to pedestrian access, internally links all uses, and connects to all existing or planned external streets, public transit, and pedestrian facilities contiguous with the project site.

o. Provide on-site bicycle parking beyond those required by California Green Building Standards Code and related facilities to support long-term use (lockers, or a locked room with standard racks and access limited to bicyclists only).

p. Implement traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.)

Significance After Mitigation

Mitigation measures have been included to reduce operational GHG emissions, including those associated with energy use, waste generation, water use, and motor vehicle use. Mitigation measures have also been included to reduce emissions associated with project construction, including emissions of Black Carbon. With implementation of Mitigation Measure GHG-1, operational GHG emissions at buildout year 2023 would be reduced to approximately 1,125 $MTCO_2e$/year. Mitigated operational GHG emissions for future year 2030 would be reduced to approximately 977 $MTCO_2e$/year. With mitigation, operational emissions would not exceed SLOAPCD's significance threshold of 1,150 $MTCO_2e$/year. With mitigation, this impact is considered ***less than significant***.

Impact GHG-B. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

In 2015-2016, CalPoly prepared the PolyCAP. The PolyCAP quantifies the potential GHG reductions from over 80 proposed policies and measures to achieve the goal of climate neutrality and resilience across all sectors. *PolyCAP* includes policies to reduce GHG emissions associated with energy use, waste generation, water use, and motor vehicle use.

The proposed land use would be consistent with current zoning designations and general plan land use designations. However, the proposed project does not include GHG-reduction measures. If unmitigated, project-generated GHG emissions would conflict with GHG-reduction planning efforts, including those identified in the *PolyCAP*. As a result, this impact is considered ***potentially significant***.

Mitigation Measures

Implement Mitigation Measure GHG-1.

Significance After Mitigation

Mitigation Measure GHG-1 includes measures to reduce construction and operational emissions of GHG's, including those associated with energy use, waste generation, water use, and motor vehicle use. With mitigation, this impact would be considered ***less than significant***.

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APPENDIX A

SLOAPCD ASBESTOS FORMS

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

3433 Roberto Court, San Luis Obispo, CA 93401
805-781-5912 – FAX: 805-781-1002

Naturally Occurring Asbestos
Construction and Grading Project Form

Applicant Information/Property Owner		**Project Name**	
Address		**Project Address**	
City, State, Zip		**City, State, Zip**	
Email for Contact Person		**Project Site Latitude, Longitude**	**Assessors Parcel Number**
Phone Number	**Date Submitted**	**Agent**	**Phone Number**

Check Applicable	DESCRIPTION (attach applicable required information)	APCD REQUIREMENT 1	APCD REQUIREMENT 2
	Project is subject to ATCM regulation but exempt (See Website Map) http://www.slocleanair.org/business/pdf/serpentine-	Geological Evaluation	Exemption Request Form
	Project is subject to ATCM regulation and project is disturbing more than one acre	Geological Evaluation	Dust Control Measure Plan
	Project is subject to ATCM regulation and project is disturbing less than one acre	Geological Evaluation	Mini Dust Control Measure Plan

Please note that the applicant will be invoiced for any associated fees.

REQUIRED APPLICANT SIGNATURE:

Legal Declaration/Authorized Signature _____ Date _____

APCD OFFICE USE ONLY				
Geological Evaluation	**Exemption Request Form**	**Dust Control Measure Plan**		**Monitoring, Health and Safety Plan**
Approved Yes ☐ No ☐	Approved: Yes ☐ No ☐	Approved: Yes ☐ No ☐		Approved: Yes ☐ No ☐
Comments:	Comments:	Comments:		
APCD Staff:	Date Received:	Date Reviewed	OIS Site #	OIS Project #
Invoice No.	Basic Fee	Additional Fees	Billable Hrs	Total Fees

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

3433 Roberto Court, San Luis Obispo, CA 93401
805-781-5912 – FAX: 805-781-1002

Naturally Occurring Asbestos
Construction & Grading Project Exemption Request Form

Applicant Information/ Property Owner		**Project Name**	
Address		**Project Address**	
City, State, Zip		**City, State, Zip**	
Email Address		**Project Site Latitude, Longitude**	**Assessors Parcel Number**
Phone Number	**Date Submitted**	**Agent**	**Phone Number**

The District may provide an exemption from Section 93105 of the California Code of Regulations - Asbestos Airborne Toxic Control Measu For Construction, Grading, Quarrying, And Surface Mining Operations for any property that has any portion of the area to be disturbed located in a geographic ultramafic rock unit; if a registered geologist has conducted a geologic evaluation of the property and determined that no serpentine or ultramafic rock is likely to be found in the area to be disturbed. Before an exemption can be granted, the owner/operator must provide a copy of a report detailing the geologic evaluation to the District for consideration. The District will approve or deny the exemption within 90 days. An outline of the required geological evaluation is provided in the District handout **"ASBESTOS AIRBORNE TOXIC CONTROL MEASURES FOR CONSTRUCTION, GRADING, QUARRYING, AND SURFACE MINING OPERATIONS – Geological Evaluation Requirements." See the APCD Website map: http://www.slocleanair.org/business/asbestos.php**

NOTE: A basic exemption evaluation fee of $172.00 will be charged.

APPLICANT MUST SIGN BELOW:

I request the San Luis Obispo County Air Pollution Control District grant this project exemption from the requirements of the ATCM based on the attached geological evaluation.

Legal Declaration/Authorized Signature _____ Date: _____

OFFICE USE ONLY - APCD Required Element – Geological Evaluation			
Date Received:	Date Reviewed:	OIS Site #:	OIS Project #:
	APCD Staff:	Approved	Not Approved
Comments:			

ASBESTOS DEMOLITION/RENOVATION NOTIFICATION FORM
GENERAL INFORMATION

The asbestos NESHAP, 40 CFR, Part 61, Subpart M, requires written notification of demolition or renovation operations under Section 61.145. Only complete notification forms are acceptable. A complete accredited asbestos survey must accompany the notification in order to be complete. Incomplete notification may result in enforcement action.

The original notification should be typewritten and **postmarked or delivered** no later than **ten working days** prior to the beginning of the asbestos removal activity (dates specified in Section VIII) or demolition (dates specified in Section IX). Notification fees apply (See attached fee schedule). Please submit the notification form to:

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

Mark Elliott, Air Quality Specialist
Enforcement Division
3433 Roberto Court
San Luis Obispo, CA 93401
(805) 781-5912 Phone
(805) 781-1002 Fax

Tim Fuhs, Air Quality Specialist
Enforcement Division
3433 Roberto Court
San Luis Obispo, CA 93401
(805) 781-5912 Phone
(805) 781-1002 Fax

Revisions are required if there are any changes to removal or demolition dates, amounts of asbestos present or removed, or to contractors, transporters, or disposal site. There is a $115.00 Revision Fee. Revisions may be faxed to the fax number above.

I. **Type of Notification:** Enter "O" if the notification is a first time or original notification, "R" if the notification is a revision of a prior notification, or "C" if the activity has been cancelled.

II. **Facility Information:** Enter the names, addresses, contact persons and telephone numbers of the following:

Owner: Legal owner of the site at which asbestos is being removed or demolition planned.

Removal Contractor: Contractor hired to remove asbestos.

Other Operator: Demolition contractor, general contractor, or any other person who leases, operates, controls, or supervises the site.

If known, the name of the site supervisor should be entered as the contact person for the notification. If additional parties share responsibility for the site, demolition activity, renovations or ACM removal, include complete information (including name, address, contact person and telephone number) on additional sheets submitted with the form.

III. **Type of Operation:** Enter "D" for facility demolition, "R" for facility renovation, "O" for ordered demolitions, or "E" for emergency renovations.

IV. **Is Asbestos Present?** Answer "Yes" or "No" regardless of the amount or type of asbestos. Pursuant to Section 61.145.a, submit a complete accredited asbestos survey with this notification.

V. **Facility Description:** Provide detailed information on the areas being renovated or demolished. If applicable, provide the floor numbers and room numbers where renovations are to be conducted.

Site Location: Provide information needed to locate site in the event that the address alone is inadequate.

Building Size: Provide in square meters or square feet.

No. of Floors: Enter the number of floors including basement or ground level floors.

Age in Years: Enter approximate age of the facility.

Present Use/Prior Use: Describe the primary use of the facility or enter the following codes:
H – Hospital; S – School; P – Public Building; O – Office; I – Industrial; U – University or College;
B – Ship; C – Commercial; or R – Residence.

VI. **Asbestos Detection Procedure:** Describe methods and procedures used to determine whether ACM is present at the site, including a description of the analytical methods employed. This must be performed by a licensed asbestos consultant or site surveillance technician.

VII. **Approximate Amount of Asbestos Including:** (1) Regulated ACM to be removed (including nonfriable ACM to be sanded, ground or abraded); (2) Category I ACM not removed; and (3) Category II ACM not removed.

For both removals and demolitions, enter the amount of RACM to be removed by entering a number in the appropriate box and an "X" for the unit. For demolitions only, enter the amount of Category I and II nonfriable asbestos not to be removed in the appropriate boxes.

Category I nonfriable material includes packing, gaskets, resilient floor covering and asphalt roofing materials containing more than one percent asbestos. Category II nonfriable material includes any material, excluding Category I products, containing more than one percent asbestos, that when dry, cannot be crumbled, pulverized or reduced to powder.

VIII. **Scheduled Dates of Asbestos Removal (MM/DD/YY):** Enter scheduled dates (month/day/year) for asbestos removal work. Asbestos removal work includes any activity, including site preparation, which may break up, dislodge or disturb asbestos material.

IX. **Scheduled Dates of Demo/Renovation (MM/DD/YY):** Enter scheduled dates (month/day/year) for beginning and ending the planned demolition or renovation.

X. **Description of Planned Demolition or Renovation Work and Method(s) to be Used:** Include in this description of the demolition and renovation techniques to be used and a description of the areas and types of facility components which will be affected by this work.

XI. **Description of Engineering Controls and Work Practices to be Used to Control Emissions of Asbestos at the Demolition and Renovation Site:** Describe the work practices and engineering controls selected to ensure compliance with the requirements of the regulations, including both asbestos removal and waste-handling emission control procedures.

XII. **Waste Transporter**: Name, address and telephone number of the asbestos waste transporter.

XIII. **Waste Disposal Site:** Identify the waste disposal site, including the complete name, location and telephone number of the facility. If ACM is to be disposed of at more than one site, provide complete information on an additional sheet submitted with the form

XIV. **If Demolition Ordered by a Government Agency, please identify the Agency below:** Provide the name of the responsible official, title and agency, authority under which the order was issued, the dates of the order and the dates of the ordered demolition.

XV. **Emergency Renovation Information:** Provide the date and time of the emergency, a description of the event and a description of unsafe conditions, equipment damage or financial burden resulting from the event. The information should be detailed enough to evaluate whether a renovation falls within the emergency exception.

XVI. **Description of Procedures to be Followed in the Event that Unexpected Asbestos is Found or Previously Nonfriable Asbestos Material Becomes Crumbled, Pulverized or Reduced to Powder:** Provide adequate information to demonstrate that appropriate actions have been considered and can be implemented to control asbestos emissions adequately, including at a minimum, conformance with applicable work practice standards.

XVII. **Certification of Presence of Trained Supervisor:** One year after promulgation of the applicable regulation, the notifier must certify that a person trained in asbestos-removal procedures will supervise the demolition or renovation. The supervisor is responsible for the activity on-site. Evidence that the training has been completed by the supervisor must be available for inspection during normal business hours.

XVIII. **Certification:** Please certify the accuracy and completeness of the information provided by signing and dating the notification form.

Asbestos NESHAP Fees

Demolition Projects Without Asbestos	
Notification Fee	$ 402.00
Demolition or Renovation Projects With Asbestos	
Less than 260 lineal feet of material; less than 160 square feet of material; or less than 35 cubic feet of material	$ 402.00
260 lineal feet or more of material but less than 1,000 lineal feet of material; 160 square feet or more of material but less than 1,000 square feet of material; or 35 cubic feet or more of material but less than 1,000 cubic feet of material	$ 632.00
1,000 lineal, square, or cubic feet or more of material but less than 10,000 lineal, square, or cubic feet of material	$ 920.00
10,000 lineal, square, or cubic feet or more of material	$1,495.00
Revisions	
Any notification revision	$ 115.00

DEMOLITION: Notification and ten-working-day wait required on all subject demolitions even if Regulated Asbestos Containing Material (RACM) is not present.

RENOVATION: Notification and ten-working-day wait required on all subject renovations when RACM is more than threshold amount (threshold amounts: 260 LF, 160 SF, 35 CF). When RACM is **below** threshold amount, notification is not required.

RESIDENTIAL DEMOLITION AND RENOVATION: NESHAP notification requirements may not apply to a single family residential structure demolition or renovation project **unless** the residential property is subject to NESHAP by other means. Call the San Luis Obispo County Air Pollution Control District (APCD)for applicability before you demolish any structure.

*Additional fees **MAY** apply to any project if significant APCD staff time is needed to determine compliance.

Annual notifications for small, unexpected jobs are assessed the appropriate fee and are due upon notification submittal.

For additional information, an Asbestos NESHAP Notification Form, or other Asbestos related issues, check our website at www.slocleanair.org/business/asbestos.asp or call the APCD at 805-781-5912.

NOTIFICATION OF DEMOLITION AND RENOVATION

OPERATOR PROJECT #	POSTMARK	NOTIFICATION #	DATE RECEIVED
I. TYPE OF NOTIFICATION (O - Original R - Revised C - Cancelled CO - Courtesy)			
II. FACILITY INFORMATION (Identify Owner, Removal Contractor, and Other Operator)			
OWNER NAME:			
ADDRESS:			
CITY:	STATE:	ZIP:	
CONTACT:	EMAIL:	TELEPHONE:	
REMOVAL CONTRACTOR:			
ADDRESS:			
CITY:	STATE:	ZIP:	
CONTACT:	EMAIL:	TELEPHONE:	
OTHER OPERATOR:			
ADDRESS:			
CITY:	STATE:	ZIP:	
CONTACT:	EMAIL:	TELEPHONE:	
III. TYPE OF OPERATION D - Demo O - Ordered Demo (*Must have written order from municipality*) R - Renovation E - Emergency Renovation/Demolition (*Written approval/authorization issued by APCD*)			
IV. IS ASBESTOS PRESENT? Yes / No (Circle one) **Attach an accredited asbestos survey in order to be accepted**			
V. FACILITY DESCRIPTION (Include building name, number, and floor or room number)			
BUILDING NAME:			
ADDRESS:			
CITY:	STATE:	COUNTY:	
SITE LOCATION:			
BUILDING SIZE:	NUMBER OF FLOORS:	AGE IN YEARS:	
PRESENT USE:	PRIOR USE:		
VI. PROCEDURE INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL			

VII. APPROXIMATE AMOUNT OF 1. Regulated ACM to be removed 2. Category I ACM not removed 3. Category II ACM not removed	RACM TO BE REMOVED	NONFRIABLE ASBESTOS MATERIAL NOT TO BE REMOVED		NONFRIABLE ASBESTOS MATERIAL TO BE REMOVED		UNIT OF MEASURE
		CAT I	CAT II	CAT I	CAT II	
PIPES						Linear Feet
SURFACE AREA						Square Feet
VOL RACM OFF FACILITY COMPONENT						Cubic Feet

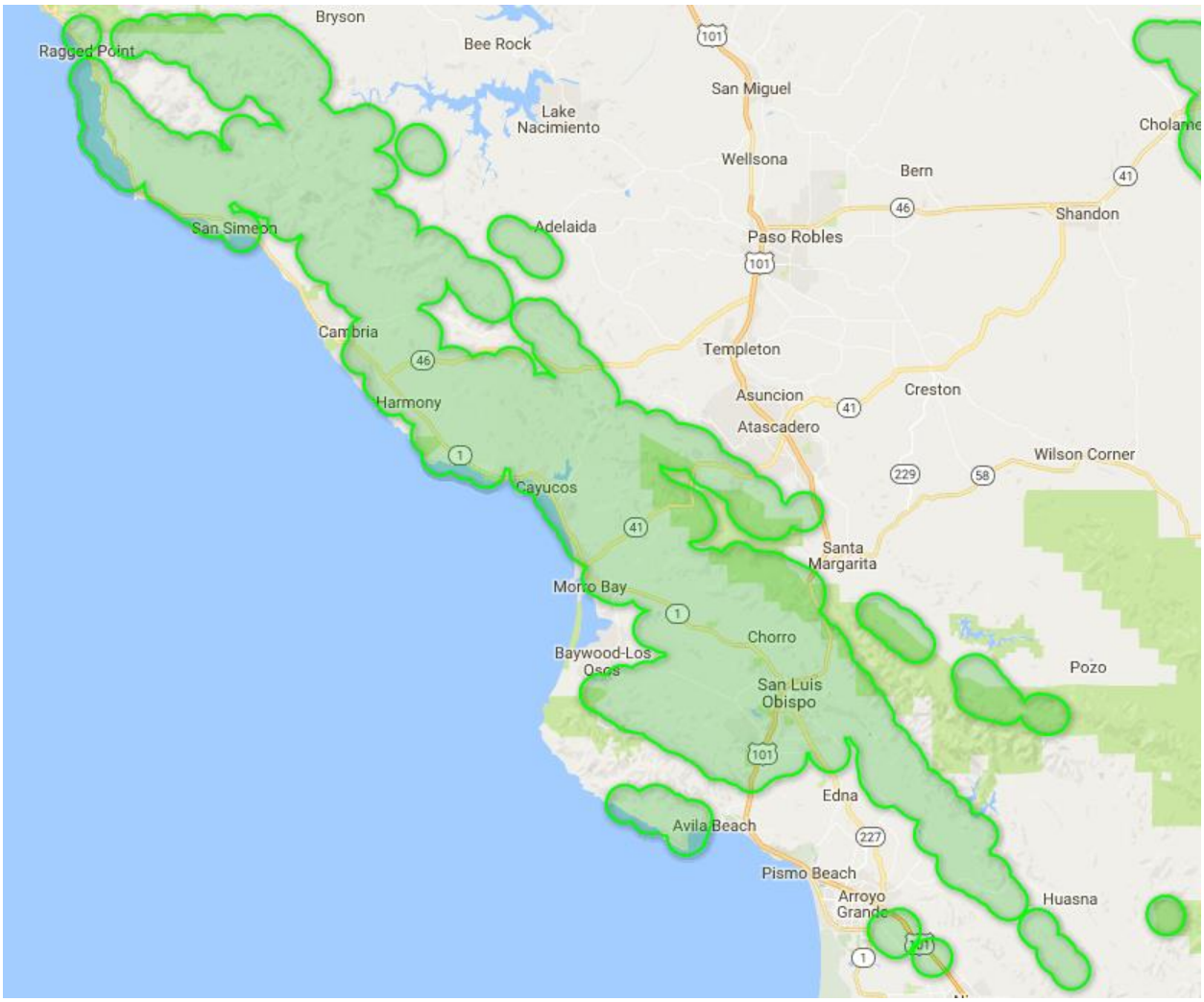
VIII. SCHEDULED DATES ASBESTOS REMOVAL NOTE: Date Changes Require Revisions Faxed to (805) 781-1002 and **a per revision fee of $115.00.**	START:	COMPLETE:
IX. SCHEDULED DATES DEMO/RENOVATION NOTE: Date Changes Require Revisions Faxed to (805) 781-1002 and a **per revision fee of $115.00.**	START:	COMPLETE:

NOTIFICATION OF DEMOLITION AND RENOVATION *(Continued)*

X.	DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:		
XI.	DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS AND TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:		
XII.	ASBESTOS WASTE TRANSPORTER #1:		
	OWNER NAME:		
	ADDRESS:		
	CITY:	STATE:	ZIP:
	CONTACT:		TELEPHONE:
	ASBESTOS WASTE TRANSPORTER #2:		
	NAME:		
	ADDRESS:		
	CITY:	STATE:	ZIP:
	CONTACT:		TELEPHONE:
XIII.	ASBESTOS WASTE DISPOSAL SITE:		
	NAME:		
	ADDRESS:		
	CITY:	STATE:	ZIP:
	CONTACT:		TELEPHONE:
XIV.	IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW AND ATTACH ORDER.		
	NAME:	TITLE:	
	AUTHORITY:		
	DATE OF ORDER (MM/DD/YY):	DATE ORDERED TO BEGIN (MM/DD/YY):	
	ADDRESS:		
XV.	FOR EMERGENCY RENOVATIONS (*Written authorization from the APCD is required*):		
	DATE AND HOUR OR EMERGENCY (MM/DD/YY):		
	DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT:		
	EXPLANATION OF HOW THE EVENT CAUSED UNSAFE CONDITIONS OR WOULD CAUSE EQUIPMENT DAMAGE OR AN UNREASONABLE FINANCIAL BURDEN:		
XVI.	DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:		
XVII.	I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS (REQUIRED 1 YEAR AFTER PROMULGATION). (Print Name) _____ (Signature of Owner/Operator) _____ (Date) _____		
XVIII.	I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT. (Print Name) _____ (Signature of Owner/Operator) _____ (Date) _____		

APPENDIX B

NATURALLY OCCURRING ASBESTOS ZONES



Source: SLOAPCD 2017. Depicts areas having a potential for naturally occurring serpentine soils.

APPENDIX C

EMISSIONS MODELING

DAILY CONST EMISSIONS SUMMARY - UNCONTROLLED

CONST PHASE/ACTIVITY	CONST YEAR	QTR	DAYS/ QTR	UNCONTROLLED DAILY CONST EMISSIONS (LBS/DAY)								
				ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5
CONSTRUCTION - PHASE I												
DEMOLITION	2017	2	20									
ONSITE				4.10	42.80		23.00	0.03	0.50	2.20	2.70	2.10
OFFSITE				0.10	0.90		1.00	0.00	0.20	0.01	0.20	0.10
TOTAL				4.20	43.70	47.90	24.00	0.03	0.70	2.21	2.90	2.20
SITE PREPARATION	2017	2	10									
ONSITE				5.00	52.30		23.50	0.04	18.10	2.90	20.90	12.60
OFFSITE				0.10	0.10		0.90	0.00	0.20	0.00	0.20	0.10
TOTAL				5.10	52.40	57.50	24.40	0.04	18.30	2.90	21.10	12.70
GRADING	2017	2	15									
ONSITE		3	20	5.80	67.90		38.80	0.06	8.70	3.10	11.80	6.40
OFFSITE				0.10	0.10		1.10	0.00	0.20	0.00	0.20	0.10
TOTAL				5.90	68.00	73.90	39.90	0.06	8.90	3.10	12.00	6.50
CONSTRUCTION	2017	3	25									
ONSITE		4	65	3.10	26.60		18.20	0.03	0.00	1.80	1.80	1.70
OFFSITE				0.30	2.00		2.50	0.01	0.40	0.02	0.40	0.10
TOTAL				3.40	28.60	32.00	20.70	0.04	0.40	1.82	2.20	1.80
ARCH COATING	2017	4	20									
ONSITE				2.50	2.20		1.90	0.00	0.00	0.20	0.20	0.20
OFFSITE				0.10	0.04		0.40	0.00	0.10	0.00	0.10	0.02
TOTAL				2.60	2.24	4.84	2.30	0.00	0.10	0.20	0.30	0.22

CONST PHASE/ACTIVITY	CONST YEAR	QTR	DAYS/ QUARTE	UNCONTROLLED DAILY CONST EMISSIONS (LBS/DAY)								
				ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5
CONSTRUCTION - PHASE II												
DEMOLITION	2020	3	20									
ONSITE				3.30	33.20		21.80	0.04	0.50	1.70	2.10	1.60
OFFSITE				0.10	0.70		0.70	0.00	0.20	0.00	0.20	0.10
TOTAL				3.40	33.90	37.30	22.50	0.04	0.70	1.70	2.30	1.70
SITE PREPARATION	2020	3	1									
ONSITE		4	9	4.10	42.40		21.50	0.04	18.10	2.20	20.30	11.90
OFFSITE				0.10	0.10		0.60	0.00	0.20	0.00	0.20	0.10
TOTAL				4.20	42.50	46.70	22.10	0.04	18.30	2.20	20.50	12.00
GRADING	2020	4	30									
ONSITE				4.50	50.20		32.00	0.10	8.70	2.20	10.80	5.60
OFFSITE				0.10	0.10		0.70	0.00	0.20	0.00	0.20	0.10
TOTAL				4.60	50.30	54.90	32.70	0.10	8.90	2.20	11.00	5.70
CONSTRUCTION	2020	4	5									
ONSITE				2.10	19.20		16.80	0.02	0.00	1.10	1.10	1.10
OFFSITE				0.60	4.20		4.50	0.00	1.10	0.03	1.10	0.30
TOTAL				2.70	23.40	26.10	21.30	0.02	1.10	1.13	2.20	1.40
CONSTRUCTION	2021	1	65									
ONSITE		2	65	1.90	17.40		16.60	0.03	0.00	1.00	1.00	0.90
OFFSITE		3	50	0.50	3.80		4.00	0.02	1.10	0.02	1.10	0.30
TOTAL				2.40	21.20	23.60	20.60	0.05	1.10	1.02	2.10	1.20
ARCH COATING	2021	3	34									
ONSITE		4	11	8.70	1.50		1.80	0.00	0.00	0.09	0.10	0.10
OFFSITE				0.10	0.10		0.60	0.00	0.19	0.00	0.20	0.10
TOTAL				8.80	1.60	10.40	2.40	0.01	0.19	0.09	0.30	0.20

CONST PHASE/ACTIVITY	CONST YEAR	QTR	DAYS/ QUARTE	UNCONTROLLED DAILY CONST EMISSIONS (LBS/DAY)								
				ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5
CONSTRUCTION - PHASE III												
DEMOLITION	2020	3	20									
ONSITE				3.30	33.20		21.80	0.04	0.34	1.66	2.00	1.60
OFFSITE				0.10	0.60		0.60	0.00	0.18	0.00	0.20	0.10
TOTAL				3.40	33.80	37.20	22.40	0.04	0.52	1.66	2.20	1.70
SITE PREPARATION	2020	3	1									
ONSITE		4	9	4.10	42.40		21.50	0.04	18.07	2.20	20.30	12.00
OFFSITE				0.10	0.10		0.60	0.00	0.18	0.00	0.20	0.10
TOTAL				4.20	42.50	46.70	22.10	0.04	18.25	2.20	20.50	12.10
GRADING	2020	4	30									
ONSITE				4.50	50.20		32.00	0.10	8.67	2.17	10.90	5.60
OFFSITE				0.10	0.10		0.70	0.00	0.20	0.00	0.20	0.10
TOTAL				4.60	50.30	54.90	32.70	0.10	8.87	2.17	11.10	5.70
CONSTRUCTION	2020	4	5									
ONSITE				2.10	19.20		16.90	0.03	0.00	1.12	1.10	1.10
OFFSITE				0.70	4.90		5.30	0.02	1.30	0.00	1.30	0.40
TOTAL				2.80	24.10	26.90	22.20	0.05	1.30	1.12	2.40	1.50
CONSTRUCTION	2021	1	65									
ONSITE		2	65	1.90	17.40		16.60	0.03	0.00	0.96	1.00	1.00
OFFSITE		3	65	0.60	4.40		4.70	0.02	1.30	0.02	1.30	0.40
TOTAL		4	65	2.50	21.80	24.30	21.30	0.05	1.30	0.98	2.30	1.40
CONSTRUCTION	2022	1	65									
ONSITE		2	65	1.70	15.60		16.40	0.03	0.00	0.81	0.80	0.80
OFFSITE		3	25	0.60	4.20		4.40	0.02	1.30	0.02	1.30	0.40
TOTAL				2.30	19.80	22.10	20.80	0.05	1.30	0.83	2.10	1.20
ARCH COATING	2022	3	60									
ONSITE				8.20	1.40		1.80	0.00	0.00	0.08	0.10	0.10
OFFSITE				0.10	0.10		0.60	0.00	0.22	0.00	0.20	0.10
TOTAL				8.30	1.50	9.80	2.40	0.01	0.22	0.08	0.30	0.20

CONST PHASE/ACTIVITY	CONST YEAR	QTR	DAYS/ QUARTE	UNCONTROLLED DAILY CONST EMISSIONS (LBS/DAY)								
				ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5
CONSTRUCTION - PHASE IV												
SITE PREPARATION	2018	2	10									
ONSITE				1.80	20.80		8.10	0.02	5.80	0.95	6.80	3.80
OFFSITE				0.10	0.04		0.40	0.00	0.08	0.00	0.10	0.02
TOTAL				1.90	20.84	22.74	8.50	0.02	5.88	0.95	6.90	3.82
GRADING	2018	2	18									
ONSITE		3	17	1.50	17.10		6.70	0.01	4.91	0.80	5.70	3.30
OFFSITE				0.10	0.04		0.40	0.00	0.08	0.00	0.10	0.02
TOTAL				1.60	17.14	18.74	7.10	0.01	4.99	0.80	5.80	3.32
CONSTRUCTION	2018	3	57									
ONSITE		4	65	2.60	17.40		13.90	0.02	0.00	1.10	1.10	1.00
OFFSITE				0.20	1.30		1.60	0.00	0.30	0.01	0.30	0.10
TOTAL				2.80	18.70	21.50	15.50	0.02	0.30	1.11	1.40	1.10
CONSTRUCTION	2019	1	65									
ONSITE		2	65	2.27	16.00		13.50	0.02	0.00	0.92	0.90	0.90
OFFSITE		3	65	0.20	1.20		1.40	0.00	0.30	0.01	0.30	0.10
TOTAL		4	65	2.47	17.20	19.67	14.90	0.02	0.30	0.93	1.20	1.00
CONSTRUCTION	2020	1	65									
ONSITE		2	65	2.00	14.80		13.20	0.02	0.00	0.80	0.80	0.80
OFFSITE		3	38	0.20	1.10		1.20	0.00	0.30	0.01	0.30	0.10
TOTAL				2.20	15.90	18.10	14.40	0.02	0.30	0.81	1.10	0.90

Architectural coatings for the greenhouse are considered negigible.

THRESHOLDS						137				7 (DPM)		

QUARTERLY CONST EMISSIONS SUMMARY - UNCONTROLLED

CONSTRUCTION PHASE	ACTIVITY	DAYS	UNCONTROLLED QUARTERLY CONST EMISSIONS (LBS/DAY)							
			ROG	NOX	ROG+NOX	CO	SO2	FUG PM10	EX PM10	PM2.5
YEAR 2017 - Q2										
CONSTRUCTION - PHASE I	DEMOLITION	20	0.04	0.44		0.24	0.00	0.01	0.02	0.02
	SITE PREPARATION	10	0.03	0.26		0.12	0.00	0.09	0.01	0.06
	GRADING	15	0.04	0.51		0.30	0.00	0.07	0.02	0.05
TOTAL			0.11	1.21	1.32	0.66	0.00	0.17	0.06	0.13
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2017-Q3										
CONSTRUCTION - PHASE I	GRADING	20	0.06	0.68		0.40	0.00	0.09	0.03	0.07
	CONSTRUCTION	25	0.04	0.36		0.26	0.00	0.01	0.02	0.02
TOTAL			0.10	1.04	1.14	0.66	0.00	0.09	0.05	0.09
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2017-Q4										
CONSTRUCTION - PHASE I	CONSTRUCTION	65	0.11	0.93		0.67	0.00	0.01	0.06	0.06
	ARCH COATING	20	0.03	0.02		0.02	0.00	0.00	0.00	0.00
TOTAL			0.14	0.95	1.09	0.70	0.00	0.01	0.06	0.06
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2018-Q2										
CONSTRUCTION - PHASE IV	SITE PREPARATION	10	0.01	0.10		0.04	0.00	0.03	0.00	0.02
CONSTRUCTION - PHASE IV	GRADING	18	0.01	0.15		0.06	0.00	0.04	0.01	0.03
TOTAL			0.02	0.26	0.28	0.11	0.00	0.07	0.01	0.05
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2018-Q3										
CONSTRUCTION - PHASE IV	GRADING	17	0.01	0.15		0.06	0.00	0.04	0.01	0.03
CONSTRUCTION - PHASE IV	CONSTRUCTION	57	0.08	0.53		0.44	0.00	0.01	0.03	0.03
TOTAL			0.09	0.68	0.77	0.50	0.00	0.05	0.04	0.06
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2018-Q4										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.09	0.61	0.70	0.50	0.00	0.01	0.04	0.04
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2019-Q1										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.08	0.56	0.64	0.48	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2019-Q2										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.08	0.56	0.64	0.48	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2019-Q3										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.08	0.56	0.64	0.48	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2019-Q4										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.08	0.56	0.64	0.48	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	

YEAR 2020-Q1										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.07	0.52	0.59	0.47	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2020-Q2										
CONSTRUCTION - PHASE IV	CONSTRUCTION	65	0.07	0.52	0.59	0.47	0.00	0.01	0.03	0.03
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2020-Q3										
CONSTRUCTION - PHASE IV	CONSTRUCTION	38	0.04	0.30		0.27	0.00	0.01	0.02	0.02
CONSTRUCTION - PHASE III	DEMOLITION	20	0.03	0.34		0.22	0.00	0.01	0.02	0.02
CONSTRUCTION - PHASE III	SITE PREPARATION	1	0.00	0.02		0.01	0.00	0.01	0.00	0.01
CONSTRUCTION - PHASE II	DEMOLITION	20	0.03	0.34		0.23	0.00	0.01	0.02	0.02
CONSTRUCTION - PHASE II	SITE PREPARATION	1	0.00	0.02		0.01	0.00	0.01	0.00	0.01
TOTAL			0.11	1.02	1.14	0.74	0.00	0.04	0.05	0.06
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2020-Q4										
CONSTRUCTION - PHASE III	SITE PREPARATION	9	0.02	0.19		0.10	0.00	0.08	0.01	0.05
CONSTRUCTION - PHASE III	GRADING	30	0.07	0.75		0.49	0.00	0.13	0.03	0.09
CONSTRUCTION - PHASE III	CONSTRUCTION	5	0.01	0.06		0.06	0.00	0.00	0.00	0.00
CONSTRUCTION - PHASE II	SITE PREPARATION	9	0.02	0.19		0.10	0.00	0.08	0.01	0.05
CONSTRUCTION - PHASE II	GRADING	30	0.07	0.75		0.49	0.00	0.13	0.03	0.09
CONSTRUCTION - PHASE II	CONSTRUCTION	5	0.01	0.06		0.05	0.00	0.00	0.00	0.00
TOTAL			0.19	2.01	2.20	1.29	0.00	0.44	0.09	0.29
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2021-Q1										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.08	0.71		0.69	0.00	0.04	0.03	0.05
CONSTRUCTION - PHASE II	CONSTRUCTION	65	0.08	0.69		0.67	0.00	0.04	0.03	0.04
TOTAL			0.16	1.40	1.56	1.36	0.00	0.08	0.06	0.08
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2021-Q2										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.08	0.71		0.69	0.00	0.04	0.03	0.05
CONSTRUCTION - PHASE II	CONSTRUCTION	65	0.08	0.69		0.67	0.00	0.04	0.03	0.04
TOTAL			0.16	1.40	1.56	1.36	0.00	0.08	0.06	0.08
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2021-Q3										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.08	0.71		0.69	0.00	0.04	0.03	0.05
CONSTRUCTION - PHASE II	CONSTRUCTION	50	0.06	0.53		0.52	0.00	0.03	0.03	0.03
CONSTRUCTION - PHASE II	ARCH COATING	34	0.15	0.03		0.04	0.00	0.00	0.00	0.00
TOTAL			0.29	1.27	1.56	1.25	0.00	0.07	0.06	0.08
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2021-Q4										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.08	0.71		0.69	0.00	0.04	0.03	0.05
CONSTRUCTION - PHASE II	ARCH COATING	11	0.05	0.01		0.01	0.00	0.00	0.00	0.00
TOTAL			0.13	0.72	0.85	0.71	0.00	0.04	0.03	0.05
THRESHOLD (T1)					2.5			2.50	0.13	
EXCEEDS?					NO			NO	NO	
YEAR 2022-Q1										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.07	0.64	0.72	0.68	0.00	0.04	0.03	0.04
TOTAL					2.5			2.50	0.13	
THRESHOLD (T1)					NO			NO	NO	
EXCEEDS?										

YEAR 2022-Q2										
CONSTRUCTION - PHASE III	CONSTRUCTION	65	0.07	0.64	0.72	0.68	0.00	0.04	0.03	0.04
TOTAL					2.5			2.50	0.13	
THRESHOLD (T1) EXCEEDS?					NO			NO	NO	
YEAR 2022-Q3										
CONSTRUCTION - PHASE III	CONSTRUCTION	25	0.03	0.25		0.26	0.00	0.02	0.01	0.02
CONSTRUCTION - PHASE III	ARCH COATING	60	0.25	0.05		0.07	0.00	0.01	0.00	0.01
TOTAL			0.28	0.29	0.57	0.33	0.00	0.02	0.01	0.02
THRESHOLD (T1) EXCEEDS?					2.5			2.50	0.13	
					NO			NO	NO	

DAILY OPERATIONAL EMISSIONS SUMMARY - UNCONTROLLED

PHASE	OPERATIONAL YEAR	UNCONTROLLED DAILY EMISSIONS (LBS/DAY)								
		ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5
PHASE I	2018									
AREA SOURCE		0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
TOTAL		0.3	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0
THRESHOLD				25.0	550.0		25.0	1.3		
EXCEEDS THRESHOLD?				NO	NO		NO	NO		
PHASE II	2022									
AREA SOURCE		1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.1	0.4	0.5	0.4	0.0	0.0	0.0	0.0	0.0
TOTAL		1.8	0.4	2.3	0.4	0.0	0.0	0.0	0.0	0.0
THRESHOLD				25.0	550.0		25.0	1.3		
EXCEEDS THRESHOLD?				NO	NO		NO	NO		
PHASE III	2023									
AREA SOURCE		2.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.1	0.6	0.7	0.5	0.0	0.0	0.0	0.0	0.0
MOBILE		2.0	8.8	10.8	25.9	0.1	8.2	0.1	8.2	2.3
TOTAL		4.4	9.4	13.8	26.4	0.1	8.2	0.1	8.3	2.3
THRESHOLD				25.0	550.0		25.0	1.3		
EXCEEDS THRESHOLD?				NO	NO		NO	NO		
PHASE IV	2021									
AREA SOURCE		1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.4	0.5	0.4	0.0	0.0	0.0	0.0	0.0
TOTAL		1.6	0.4	2.0	0.4	0.0	0.0	0.0	0.0	0.0
THRESHOLD				25.0	550.0		25.0	1.3		
EXCEEDS THRESHOLD?				NO	NO		NO	NO		
BUILDOUT	2023									
AREA SOURCE		5.9	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.2	1.6	1.7	1.3	0.0	0.0	0.1	0.1	0.1
MOBILE		2.0	8.8	10.8	25.9	0.1	8.2	0.1	8.2	2.3
TOTAL		8.1	10.3	18.4	27.2	0.1	8.2	0.2	8.4	2.4
THRESHOLD				25.0	550.0		25.0	1.3		
EXCEEDS THRESHOLD?				NO	NO		NO	NO		

**Buildout year is conservatively based on calculated emissions for previous project phases with earlier phase buildout years. Future year emissions are projected to be lower due to improvements in vehicle emission rates and increased use of renewable energy sources. Includes the addition of 4 employees at buildout.*

**Mobile source emissions were calcuated based on trip-generation rates obtained from the traffic analysis prepared for this project. Increases in trip-generation is anticipated to be largely limited to 30-days/year. CalEEMod emissions were adjusted to reflect daily emission rates.*

**Totals may not sum due to rounding.*

ANNUAL OPERATIONAL EMISSIONS SUMMARY - UNCONTROLLED

PHASE	OPERATIONAL YEAR	UNCONTROLLED ANNUAL EMISSIONS (TONS/YR)									
		ROG	NOX	ROG+NOX	CO	SO2	FGPM10	EXPM10	TOTPM10	PM2.5	MTCO2e
PHASE I	2018										
AREA SOURCE		0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.4
TOTAL		0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	33.4
THRESHOLD				25.0			25.0				
EXCEEDS THRESHOLD?											
PHASE II	2022										
AREA SOURCE		0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	231.9
TOTAL		0.3	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	231.9
THRESHOLD				25.0			25.0				
EXCEEDS THRESHOLD?											
PHASE III	2023										
AREA SOURCE		0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	290.4
MOBILE		0.0	0.1	0.2	0.4	0.0	0.1	0.0	0.1	0.0	116.1
TOTAL		0.4	0.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	290.4
THRESHOLD				25.0			25.0				
EXCEEDS THRESHOLD?											
PHASE IV	2021										
AREA SOURCE		0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	197.7
TOTAL		0.3	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	197.7
THRESHOLD				25.0			25.0				
EXCEEDS THRESHOLD?											
BUILDOUT	2023										
AREA SOURCE		1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY USE		0.0	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	753.4
MOBILE		0.0	0.1	0.2	0.4	0.0	0.1	0.0	0.1	0.0	116.1
TOTAL		1.1	0.3	1.4	0.3	0.0	0.0	0.0	0.0	0.0	753.4
THRESHOLD				25.0			25.0				
EXCEEDS THRESHOLD?											

**Mobile source emissions were calcuated based on trip-generation rates obtained from the traffic analysis prepared for this project. Increases in trip-generation is anticipated to be largely limited to 30-days/year. CalEEMod emissions were adjusted to reflect 30-day emission rates.*

**Totals may not sum due to rounding.*

GHG EMISSION SUMMARY

OPERATIONAL YEAR	PROJECT PHASE	SOURCE	MTCO2e/YR UNCONTROLLED	MTCO2e/YR W/GHG-REDUCTION MEASURES
2020	I	AREA	0.0	0.0
		ENERGY	31.3	31.3
		MOBILE	0.0	0.0
		WASTE	5.9	3.0
		WATER	5.6	4.5
		TOTAL	**42.8**	**38.7**
		THRESHOLD	1150.0	1150.0
		EXCEEDS THRESHOLD	NO	NO
2023	BUILDOUT	AREA	0.0	0.0
		ENERGY	753.4	753.3
		MOBILE	116.1	116.1
		WASTE	188.0	94.0
		WATER	131.3	105.1
		TOTAL	**1188.7**	**1068.5**
		THRESHOLD	**1150.0**	1150.0
		EXCEEDS THRESHOLD	**YES**	NO
2030	BUILDOUT	AREA	0.0	0.0
		ENERGY	639.5	639.6
		MOBILE	93.7	93.7
		WASTE	188.0	94.0
		WATER	115.4	92.4
		TOTAL	**1036.7**	**919.7**
		THRESHOLD	1150.0	1150.0
		EXCEEDS THRESHOLD	NO	NO

**Totals may not sum due to rounding.*

EMISSIONS MODELING ASSUMPTIONS

PHASE I

START DATE	May-17	
END DATE	Dec-17	
FOALING BARN	2048	SF FLOOR AREA
STALLION BARN	4798	SF FLOOR AREA
HAY BARN EXPANSION	2640	SF FLOOR AREA
TOTAL BARN	9486	SF FLOOR AREA
UNPAVED SURFACES/PARKING	1.7	ACRES
DEMOLITION OF EXISTING STRUCTURES	9121	SF FLOOR AREA
SOIL IMPORT/EXPORT	BALANCED ONSITE	
TRIP-GEN RATE	INCONSEQUENTIAL COMPARED TO EXISTING CONDITIONS	

PHASE II

START DATE	Sep-20	
END DATE	Sep-21	
PAVILION 2	54508	SF FLOOR AREA
ANIMAL HEALTH CENTER	10000	SF FLOOR AREA
STORAGE BARN	3000	SF FLOOR AREA
DEMOLITION OF EXISTING STRUCTURES	62582	SF FLOOR AREA
SOIL IMPORT/EXPORT	BALANCED ONSITE	
UNPAVED SURFACES/PARKING	2.8	ACRES
TRIP-GEN RATE	INCONSEQUENTIAL COMPARED TO EXISTING CONDITIONS	

PHASE III

START DATE	Sep-20	
END DATE	Sep-22	
EVENT CENTER	88150	SF FLOOR AREA
DEMOLITION OF EXISTING STRUCTURES	6731	SF FLOOR AREA
SOIL IMPORT/EXPORT	BALANCED ONSITE	
UNPAVED SURFACES/PARKING	3.7	ACRES
EVENT CENTER TRIP-GEN	1200 TRIPS/DAY/EVENT, 30 EVENT DAYS/YEAR	
EVENT CENTER TRIP-GEN RATE	13.613	

PHASE IV

START DATE	May-18	
END DATE	Sep-20	
GREENHOUSE	60000	SF FLOOR AREA
DEMOLITION OF EXISTING STRUCTURES	NONE	SF FLOOR AREA
SOIL IMPORT/EXPORT	BALANCED ONSITE	
TRIP-GEN RATE	INCONSEQUENTIAL COMPARED TO EXISTING (CCTC 2017)	

CalPoly Oppenheimer - Phase I

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.49	1000sqft	23.30	9,486.00	0
Other Non-Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	546.6	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Annual

Project Characteristics - Phase I only.

Land Use - 9.486sf of building area, 1.7 acres other/non-asphalt surfaces

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 35 days, construction 90 days, coating 20 days. Construction adjusted to reflect overall construction period of 8 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	4,443.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblLandUse	BuildingSpaceSquareFeet	9,490.00	9,486.00
tblLandUse	LandUseSquareFeet	9,490.00	9,486.00
tblLandUse	LotAcreage	0.22	23.30
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	546.6

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
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tblVehicleEF	LDT2	1.15	3.52
tblVehicleEF	LDT2	282.44	406.52
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.10	0.38
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.07	0.13

tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	2.8300e-003	4.0840e-003
tblVehicleEF	LDT2	6.7500e-004	9.7800e-004
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	4.3310e-003	0.01
tblVehicleEF	LDT2	6.1920e-003	0.03
tblVehicleEF	LDT2	0.59	1.48
tblVehicleEF	LDT2	1.47	4.58
tblVehicleEF	LDT2	269.14	387.45
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.11	0.44
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.03	0.06

tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	2.6960e-003	3.8920e-003
tblVehicleEF	LDT2	6.8000e-004	9.9600e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.93	1.79
tblVehicleEF	LHD1	1.87	3.06
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.63	3.11
tblVehicleEF	LHD1	0.78	0.95
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9300e-004	3.3000e-004
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.20	0.33
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02

tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.94	1.82
tblVehicleEF	LHD1	1.75	2.86
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.57	3.00
tblVehicleEF	LHD1	0.74	0.89
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.18	0.29
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003

tblVehicleEF	LHD1	2.9100e-004	3.2600e-004
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.16	0.25
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.19	0.32
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.92	1.78
tblVehicleEF	LHD1	1.93	3.16
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.62	3.08
tblVehicleEF	LHD1	0.81	0.98
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8650e-003
tblVehicleEF	LHD1	2.9400e-004	3.3200e-004
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.21	0.34
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0770e-003	0.01
tblVehicleEF	LHD2	3.6530e-003	9.9930e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.82	1.29
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14

tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.60	2.72
tblVehicleEF	LHD2	0.28	0.49
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004

tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.1140e-003	0.01
tblVehicleEF	LHD2	3.5240e-003	9.5060e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.03
tblVehicleEF	LHD2	0.77	1.21
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.58	2.63
tblVehicleEF	LHD2	0.27	0.46
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
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tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0570e-003	0.01
tblVehicleEF	LHD2	3.7240e-003	0.01
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.84	1.33
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.59	2.70
tblVehicleEF	LHD2	0.28	0.50

tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	MCY	0.43	0.39
tblVehicleEF	MCY	0.16	0.18

tblVehicleEF	MCY	18.71	23.95
tblVehicleEF	MCY	10.37	10.07
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.17	1.23
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.14	2.47
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.25	2.47
tblVehicleEF	MCY	2.0370e-003	2.0600e-003
tblVehicleEF	MCY	6.9300e-004	7.4100e-004
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.66	2.94
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.44	2.68
tblVehicleEF	MCY	0.42	0.37
tblVehicleEF	MCY	0.14	0.15

tblVehicleEF	MCY	17.66	22.30
tblVehicleEF	MCY	9.19	9.05
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.06	1.11
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.07	2.34
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	1.93	2.09
tblVehicleEF	MCY	2.0180e-003	2.0290e-003
tblVehicleEF	MCY	6.6500e-004	7.1300e-004
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.57	2.79
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	2.10	2.27
tblVehicleEF	MCY	0.44	0.40
tblVehicleEF	MCY	0.18	0.19

tblVehicleEF	MCY	19.44	25.08
tblVehicleEF	MCY	10.99	10.63
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.18	1.24
tblVehicleEF	MCY	0.33	0.34
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.18	2.55
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.41	2.66
tblVehicleEF	MCY	2.0500e-003	2.0800e-003
tblVehicleEF	MCY	7.0800e-004	7.5600e-004
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.71	3.03
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.62	2.89
tblVehicleEF	MDV	7.1160e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.79	2.10
tblVehicleEF	MDV	2.28	5.67
tblVehicleEF	MDV	365.97	513.88
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.21	0.60
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.16	0.47
tblVehicleEF	MDV	3.6620e-003	5.1620e-003
tblVehicleEF	MDV	9.1900e-004	1.2860e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.18	0.52
tblVehicleEF	MDV	7.5450e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.85	2.21
tblVehicleEF	MDV	1.91	4.74
tblVehicleEF	MDV	380.55	534.42
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.10	0.29
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.14	0.41
tblVehicleEF	MDV	3.8090e-003	5.3690e-003
tblVehicleEF	MDV	9.1300e-004	1.2690e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.15	0.45
tblVehicleEF	MDV	6.9970e-003	0.02
tblVehicleEF	MDV	0.01	0.04

tblVehicleEF	MDV	0.78	2.09
tblVehicleEF	MDV	2.45	6.12
tblVehicleEF	MDV	363.07	509.79
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.22	0.63
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.17	0.50
tblVehicleEF	MDV	3.6330e-003	5.1210e-003
tblVehicleEF	MDV	9.2200e-004	1.2940e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04

tblVehicleEF	MH	0.87	6.14
tblVehicleEF	MH	4.40	9.22
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.77	1.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.58
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3900e-004	8.0700e-004
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.29	0.64

tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.89	6.17
tblVehicleEF	MH	4.08	8.53
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.34	2.26
tblVehicleEF	MH	0.73	1.02
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.07	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.25	0.55
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3300e-004	7.9500e-004
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.09	0.34

tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.28	0.60
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.86	6.15
tblVehicleEF	MH	4.54	9.55
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.39	2.38
tblVehicleEF	MH	0.80	1.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.60
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4100e-004	8.1300e-004
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14

tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.30	0.66
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9950e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.35	0.60
tblVehicleEF	MHD	0.27	1.36
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tblVehicleEF	MHD	11.30	10.90
tblVehicleEF	MHD	1.2800e-004	8.2220e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.2300e-004	7.8670e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	4.0300e-004	9.4500e-004

tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.73
tblVehicleEF	MHD	1.4160e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9900e-004	8.6500e-004
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.26	0.79
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	3.0230e-003	0.02
tblVehicleEF	MHD	0.03	0.09
tblVehicleEF	MHD	0.23	0.41
tblVehicleEF	MHD	0.27	1.37
tblVehicleEF	MHD	3.61	11.15
tblVehicleEF	MHD	156.26	151.37
tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.46	1.43
tblVehicleEF	MHD	1.22	4.18
tblVehicleEF	MHD	11.27	10.81
tblVehicleEF	MHD	1.0800e-004	6.9320e-003

tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.0300e-004	6.6320e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.23	0.69
tblVehicleEF	MHD	1.5010e-003	1.4560e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9400e-004	8.5100e-004
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.25	0.75
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9790e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.44	0.77
tblVehicleEF	MHD	0.27	1.35

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tblVehicleEF	MHD	0.43	1.32
tblVehicleEF	MHD	1.25	4.30
tblVehicleEF	MHD	11.32	10.95
tblVehicleEF	MHD	1.5600e-004	0.01
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tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.4900e-004	9.5720e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.75
tblVehicleEF	MHD	1.3040e-003	1.2660e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.0100e-004	8.7300e-004
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.03	0.07

tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.27	0.82
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7130e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.24	0.28
tblVehicleEF	OBUS	0.37	1.36
tblVehicleEF	OBUS	4.77	8.89
tblVehicleEF	OBUS	136.21	95.08
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.31	0.62
tblVehicleEF	OBUS	1.08	2.82
tblVehicleEF	OBUS	3.70	3.21
tblVehicleEF	OBUS	2.8000e-005	3.6900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.7000e-005	3.5300e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004

tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
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tblVehicleEF	OBUS	1.3110e-003	9.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	8.6600e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.33	0.61
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7950e-003	0.02
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.23	0.26
tblVehicleEF	OBUS	0.38	1.39
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tblVehicleEF	OBUS	143.39	99.72
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.32	0.64
tblVehicleEF	OBUS	1.04	2.71
tblVehicleEF	OBUS	3.65	3.12
tblVehicleEF	OBUS	2.4000e-005	3.1100e-004

tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.3000e-005	2.9800e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.28	0.53
tblVehicleEF	OBUS	1.3790e-003	9.6400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0600e-004	8.5500e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
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tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.31	0.58
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.6690e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.25	0.30
tblVehicleEF	OBUS	0.37	1.35

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tblVehicleEF	OBUS	1.07	2.80
tblVehicleEF	OBUS	3.72	3.25
tblVehicleEF	OBUS	3.4000e-005	4.4900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	3.3000e-005	4.3000e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.31	0.57
tblVehicleEF	OBUS	1.2160e-003	8.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1400e-004	8.7100e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.33	0.63
tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.19
tblVehicleEF	SBUS	6.62	7.35
tblVehicleEF	SBUS	0.76	3.18
tblVehicleEF	SBUS	7.89	21.72
tblVehicleEF	SBUS	1,145.19	1,180.91
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.70	12.02
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tblVehicleEF	SBUS	13.61	14.11
tblVehicleEF	SBUS	2.9560e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.8280e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
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tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.9100e-004	8.7900e-004
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
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tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
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tblVehicleEF	SBUS	0.42	1.12
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tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.07	0.17
tblVehicleEF	SBUS	6.54	7.20
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tblVehicleEF	SBUS	6.36	17.53
tblVehicleEF	SBUS	1,199.90	1,236.25
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.88	12.40
tblVehicleEF	SBUS	2.15	5.99

tblVehicleEF	SBUS	13.58	14.02
tblVehicleEF	SBUS	2.4920e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.3840e-003	0.01
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.87
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.91
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6500e-004	8.1000e-004
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.99
tblVehicleEF	SBUS	0.81	0.83

tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.20
tblVehicleEF	SBUS	6.73	7.56
tblVehicleEF	SBUS	0.75	3.14
tblVehicleEF	SBUS	8.48	23.35
tblVehicleEF	SBUS	1,069.66	1,104.48
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.45	11.49
tblVehicleEF	SBUS	2.21	6.19
tblVehicleEF	SBUS	13.62	14.15
tblVehicleEF	SBUS	3.5960e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	3.4410e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	0.79	0.88
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	1.07

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.0100e-004	9.0600e-004
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	1.14	1.27
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	1.17
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	2.01	4.92
tblVehicleEF	UBUS	8.63	9.83
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.51	10.43
tblVehicleEF	UBUS	12.44	14.50
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06

tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.74
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5480e-003	1.3050e-003
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.20	0.85
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.81
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	2.02	4.97
tblVehicleEF	UBUS	7.31	8.16
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.38	10.08
tblVehicleEF	UBUS	12.37	14.43
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004

tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.70	0.66
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5240e-003	1.2760e-003
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.20	0.86
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.72
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.06
tblVehicleEF	UBUS	2.01	4.90
tblVehicleEF	UBUS	9.27	10.63
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.48	10.34
tblVehicleEF	UBUS	12.48	14.53
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25

tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.16	0.68
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.81	0.78
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5590e-003	1.3190e-003
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.20	0.84
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.89	0.85
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3498	3.1962	2.0093	3.2700e-003	0.2715	0.1734	0.4449	0.1199	0.1615	0.2814						300.0825
Maximum	**0.3498**	**3.1962**	**2.0093**	**3.2700e-003**	**0.2715**	**0.1734**	**0.4449**	**0.1199**	**0.1615**	**0.2814**						**300.0825**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1113	1.5584	1.9731	3.2700e-003	0.1210	0.0788	0.1998	0.0508	0.0788	0.1296						300.0822
Maximum	**0.1113**	**1.5584**	**1.9731**	**3.2700e-003**	**0.1210**	**0.0788**	**0.1998**	**0.0508**	**0.0788**	**0.1296**						**300.0822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.18**	**51.24**	**1.80**	**0.00**	**55.44**	**54.55**	**55.09**	**57.63**	**51.23**	**53.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2017	7-31-2017	2.0593	0.8626
2	8-1-2017	9-30-2017	0.6951	0.3733
		Highest	2.0593	0.8626

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						33.3637
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						5.9192
Water						0.0000	0.0000		0.0000	0.0000						5.9427
Total	**0.0513**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**45.2259**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						33.3637
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						2.9596
Water						0.0000	0.0000		0.0000	0.0000						4.7542
Total	**0.0470**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**41.0778**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**8.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.17**

3.0 Construction Detail

Construction Phase

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2017	5/26/2017	5	20	
2	Site Preparation	Site Preparation	5/27/2017	6/9/2017	5	10	
3	Grading	Grading	6/10/2017	7/28/2017	5	35	
4	Building Construction	Building Construction	7/29/2017	12/1/2017	5	90	
5	Architectural Coating	Architectural Coating	12/2/2017	12/29/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 1.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,229; Non-Residential Outdoor: 4,743; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Rubber Tired Dozers	3	8.00	247	0.40
	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	7.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004						0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204						35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**4.6300e-003**	**0.0219**	**0.0266**	**7.0000e-004**	**0.0204**	**0.0211**						**35.8438**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						35.8438
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.8100e-003**	**8.6300e-003**	**0.0104**	**2.7000e-004**	**8.6300e-003**	**8.9000e-003**						**35.8438**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132						17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0903**	**0.0144**	**0.1047**	**0.0497**	**0.0132**	**0.0629**						**17.8025**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						17.8025
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0352**	**4.7300e-003**	**0.0400**	**0.0194**	**4.7300e-003**	**0.0241**						**17.8025**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629						0.0000
Off-Road	0.1006	1.1889	0.6787	1.0900e-003		0.0538	0.0538		0.0495	0.0495						101.5013
Total	**0.1006**	**1.1889**	**0.6787**	**1.0900e-003**	**0.1518**	**0.0538**	**0.2056**	**0.0629**	**0.0495**	**0.1124**						**101.5013**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0592	0.0000	0.0592	0.0246	0.0000	0.0246						0.0000
Off-Road	0.0267	0.5246	0.6426	1.0900e-003		0.0227	0.0227		0.0227	0.0227						101.5012
Total	**0.0267**	**0.5246**	**0.6426**	**1.0900e-003**	**0.0592**	**0.0227**	**0.0819**	**0.0246**	**0.0227**	**0.0473**						**101.5012**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1402	1.1950	0.8182	1.2100e-003		0.0805	0.0805		0.0756	0.0756						108.8883
Total	**0.1402**	**1.1950**	**0.8182**	**1.2100e-003**		**0.0805**	**0.0805**		**0.0756**	**0.0756**						**108.8883**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.6402	0.8043	1.2100e-003		0.0407	0.0407		0.0407	0.0407						108.8882
Total	**0.0303**	**0.6402**	**0.8043**	**1.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**						**108.8882**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003						2.5600
Total	**0.0253**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**						**2.5600**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004						2.5600
Total	**0.0226**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**						**2.5600**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018
Other Non-Asphalt Surfaces	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						19.8796
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						19.8796
NaturalGas Mitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
NaturalGas Unmitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				19.8796
Other Non-Asphalt Surfaces	0				0.0000
Total					**19.8796**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				19.8796
Other Non-Asphalt Surfaces	0				0.0000
Total					**19.8796**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Unmitigated	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.1400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0500**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.7400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0456**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				4.7542
Unmitigated				5.9427

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.19456 / 0				5.9427
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**5.9427**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.75565 / 0				4.7542
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**4.7542**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				2.9596
Unmitigated				5.9192

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	11.77				5.9192
Other Non-Asphalt Surfaces	0				0.0000
Total					**5.9192**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.885				2.9596
Other Non-Asphalt Surfaces	0				0.0000
Total					**2.9596**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase II

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	10.00	1000sqft	0.23	10,000.00	0
General Light Industry	54.51	1000sqft	9.05	54,508.00	0
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
Other Asphalt Surfaces	0.85	Acre	0.85	37,026.00	0
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Phase II only.

Land Use - 54508 sf pavilion, 3000sf barn, 10000 animal care facility, 2.8 acres non-asphalt surfaces, 0.85 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 185 days, coating 45 days. Construction adjusted to reflect overall construction period of 12 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	300.00	185.00
tblLandUse	BuildingSpaceSquareFeet	54,510.00	54,508.00
tblLandUse	LandUseSquareFeet	54,510.00	54,508.00
tblLandUse	LotAcreage	1.25	9.05
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2022

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1602	1.6336	1.1220	2.1700e-003	0.2456	0.0763	0.3219	0.1098	0.0707	0.1805						192.6200
2021	0.3844	1.7070	1.6664	3.4300e-003	0.0884	0.0786	0.1670	0.0238	0.0741	0.0979						305.0902
Maximum	**0.3844**	**1.7070**	**1.6664**	**3.4300e-003**	**0.2456**	**0.0786**	**0.3219**	**0.1098**	**0.0741**	**0.1805**						**305.0902**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1602	1.6336	1.1220	2.1700e-003	0.1084	0.0763	0.1846	0.0462	0.0707	0.1169						192.6198
2021	0.3844	1.7070	1.6664	3.4300e-003	0.0884	0.0786	0.1670	0.0238	0.0741	0.0979						305.0899
Maximum	**0.3844**	**1.7070**	**1.6664**	**3.4300e-003**	**0.1084**	**0.0786**	**0.1846**	**0.0462**	**0.0741**	**0.1169**						**305.0899**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**41.11**	**0.00**	**28.08**	**47.62**	**0.00**	**22.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	1.4938	1.4938
2	12-1-2020	2-28-2021	0.7880	0.7880
3	3-1-2021	5-31-2021	0.7768	0.7768
4	6-1-2021	8-31-2021	0.6714	0.6714
5	9-1-2021	9-30-2021	0.1105	0.1105
		Highest	1.4938	1.4938

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3243	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Energy	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						231.8788
Mobile	0.1729	0.7555	2.0103	5.9500e-003	0.5479	6.1000e-003	0.5540	0.1467	5.7300e-003	0.1524						545.0586
Waste						0.0000	0.0000		0.0000	0.0000						89.7227
Water						0.0000	0.0000		0.0000	0.0000						37.5119
Total	**0.5060**	**0.8348**	**2.0781**	**6.4300e-003**	**0.5479**	**0.0121**	**0.5601**	**0.1467**	**0.0118**	**0.1585**						**904.1745**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2930	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Energy	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						231.8788
Mobile	0.1729	0.7555	2.0103	5.9500e-003	0.5479	6.1000e-003	0.5540	0.1467	5.7300e-003	0.1524						545.0586
Waste						0.0000	0.0000		0.0000	0.0000						44.8613
Water						0.0000	0.0000		0.0000	0.0000						30.0354
Total	**0.4747**	**0.8348**	**2.0781**	**6.4300e-003**	**0.5479**	**0.0121**	**0.5601**	**0.1467**	**0.0118**	**0.1585**						**851.8367**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.79**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	8/9/2021	5	185	
5	Architectural Coating	Architectural Coating	8/10/2021	10/11/2021	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,262; Non-Residential Outdoor: 33,754; Striped Parking Area: 9,540 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	94.00	37.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**4.6300e-003**	**0.0166**	**0.0212**	**7.0000e-004**	**0.0154**	**0.0161**						**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	6.5900e-003	1.4300e-003	2.0000e-005	3.5000e-004	3.0000e-005	3.8000e-004	1.0000e-004	3.0000e-005	1.2000e-004						1.5792
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**8.4000e-004**	**7.1900e-003**	**6.5900e-003**	**3.0000e-005**	**1.7900e-003**	**4.0000e-005**	**1.8300e-003**	**4.8000e-004**	**4.0000e-005**	**5.1000e-004**						**2.7883**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2385
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**1.8100e-003**	**0.0166**	**0.0184**	**2.7000e-004**	**0.0154**	**0.0157**						**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	6.5900e-003	1.4300e-003	2.0000e-005	3.5000e-004	3.0000e-005	3.8000e-004	1.0000e-004	3.0000e-005	1.2000e-004						1.5792
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**8.4000e-004**	**7.1900e-003**	**6.5900e-003**	**3.0000e-005**	**1.7900e-003**	**4.0000e-005**	**1.8300e-003**	**4.8000e-004**	**4.0000e-005**	**5.1000e-004**						**2.7883**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**						**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0352**	**0.0110**	**0.0462**	**0.0194**	**0.0101**	**0.0295**						**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3872
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.1301**	**0.0326**	**0.1627**	**0.0540**	**0.0300**	**0.0840**						**82.3872**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3871
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.0507**	**0.0326**	**0.0834**	**0.0210**	**0.0300**	**0.0510**						**82.3871**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6232
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6232**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.9300e-003	0.0539	0.0163	1.0000e-004	2.3500e-003	2.9000e-004	2.6500e-003	6.8000e-004	2.8000e-004	9.6000e-004						9.9807
Worker	5.7600e-003	5.2300e-003	0.0453	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4400e-003						10.6079
Total	**7.6900e-003**	**0.0592**	**0.0616**	**2.2000e-004**	**0.0150**	**3.7000e-004**	**0.0154**	**4.0500e-003**	**3.6000e-004**	**4.4000e-003**						**20.5886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6231
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6231**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.9300e-003	0.0539	0.0163	1.0000e-004	2.3500e-003	2.9000e-004	2.6500e-003	6.8000e-004	2.8000e-004	9.6000e-004						9.9807
Worker	5.7600e-003	5.2300e-003	0.0453	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4400e-003						10.6079
Total	**7.6900e-003**	**0.0592**	**0.0616**	**2.2000e-004**	**0.0150**	**3.7000e-004**	**0.0154**	**4.0500e-003**	**3.6000e-004**	**4.4000e-003**						**20.5886**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1492	1.3684	1.3012	2.1100e-003		0.0753	0.0753		0.0708	0.0708						182.9320
Total	**0.1492**	**1.3684**	**1.3012**	**2.1100e-003**		**0.0753**	**0.0753**		**0.0708**	**0.0708**						**182.9320**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	8.8500e-003	0.2765	0.0810	5.7000e-004	0.0132	7.9000e-004	0.0140	3.8100e-003	7.5000e-004	4.5700e-003						55.6262
Worker	0.0301	0.0262	0.2300	6.4000e-004	0.0710	4.5000e-004	0.0715	0.0189	4.2000e-004	0.0193						57.4490
Total	**0.0389**	**0.3027**	**0.3111**	**1.2100e-003**	**0.0842**	**1.2400e-003**	**0.0855**	**0.0227**	**1.1700e-003**	**0.0239**						**113.0752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1492	1.3684	1.3012	2.1100e-003		0.0753	0.0753		0.0708	0.0708						182.9318
Total	**0.1492**	**1.3684**	**1.3012**	**2.1100e-003**		**0.0753**	**0.0753**		**0.0708**	**0.0708**						**182.9318**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	8.8500e-003	0.2765	0.0810	5.7000e-004	0.0132	7.9000e-004	0.0140	3.8100e-003	7.5000e-004	4.5700e-003						55.6262
Worker	0.0301	0.0262	0.2300	6.4000e-004	0.0710	4.5000e-004	0.0715	0.0189	4.2000e-004	0.0193						57.4490
Total	**0.0389**	**0.3027**	**0.3111**	**1.2100e-003**	**0.0842**	**1.2400e-003**	**0.0855**	**0.0227**	**1.1700e-003**	**0.0239**						**113.0752**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003						5.7547
Total	**0.1945**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**						**5.7547**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.7400e-003	1.5200e-003	0.0133	4.0000e-005	4.1200e-003	3.0000e-005	4.1400e-003	1.0900e-003	2.0000e-005	1.1200e-003						3.3283
Total	**1.7400e-003**	**1.5200e-003**	**0.0133**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**2.0000e-005**	**1.1200e-003**						**3.3283**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003						5.7547
Total	**0.1945**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**						**5.7547**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.7400e-003	1.5200e-003	0.0133	4.0000e-005	4.1200e-003	3.0000e-005	4.1400e-003	1.0900e-003	2.0000e-005	1.1200e-003						3.3283
Total	**1.7400e-003**	**1.5200e-003**	**0.0133**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**2.0000e-005**	**1.1200e-003**						**3.3283**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1729	0.7555	2.0103	5.9500e-003	0.5479	6.1000e-003	0.5540	0.1467	5.7300e-003	0.1524						545.0586
Unmitigated	0.1729	0.7555	2.0103	5.9500e-003	0.5479	6.1000e-003	0.5540	0.1467	5.7300e-003	0.1524						545.0586

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	379.93	71.95	37.07	947,056	947,056
Medical Office Building	361.30	89.60	15.50	495,366	495,366
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	16,634	16,634
Total	746.27	166.59	57.61	1,459,056	1,459,056

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Medical Office Building	13.00	5.00	5.00	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	13.00	5.00	5.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
General Light Industry	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Unrefrigerated Warehouse-No Rail	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Non-Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						145.0048
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						145.0048
NaturalGas Mitigated	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						86.8741
NaturalGas Unmitigated	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						86.8741

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.44337e+006	7.7800e-003	0.0708	0.0594	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003						77.4815
Medical Office Building	164500	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.8305
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	10470	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5620
Total		**8.7300e-003**	**0.0793**	**0.0666**	**4.7000e-004**		**6.0300e-003**	**6.0300e-003**		**6.0300e-003**	**6.0300e-003**						**86.8741**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.44337e+006	7.7800e-003	0.0708	0.0594	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003						77.4815
Medical Office Building	164500	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.8305
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	10470	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5620
Total		**8.7300e-003**	**0.0793**	**0.0666**	**4.7000e-004**		**6.0300e-003**	**6.0300e-003**		**6.0300e-003**	**6.0300e-003**						**86.8741**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	458957				102.0788
Medical Office Building	182200				40.5239
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	10800				2.4021
Total					**145.0048**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	458957				102.0788
Medical Office Building	182200				40.5239
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	10800				2.4021
Total					**145.0048**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2930	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Unmitigated	0.3243	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0503					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2739					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Total	**0.3243**	**1.0000e-005**	**1.2000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.4800e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0190					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2739					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2000e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Total	**0.2930**	**1.0000e-005**	**1.2000e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.4800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				30.0354
Unmitigated				37.5119

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	12.6054 / 0				32.3285
Medical Office Building	1.25481 / 0.239011				3.4042
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0				1.7792
Total					**37.5119**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	10.0844 / 0				25.8628
Medical Office Building	1.00384 / 0.224431				2.7492
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Unrefrigerated Warehouse-No Rail	0.555 / 0				1.4234
Total					**30.0354**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				44.8613
Unmitigated				89.7227

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	67.59				33.9911
Medical Office Building	108				54.3134
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	2.82				1.4182
Total					**89.7227**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	33.795				16.9956
Medical Office Building	54				27.1567
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	1.41				0.7091
Total					**44.8613**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase III

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	88.15	1000sqft	7.00	88,150.00	0
Other Non-Asphalt Surfaces	3.70	Acre	3.70	161,172.00	0
Other Asphalt Surfaces	0.33	Acre	0.33	14,374.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Annual

Project Characteristics - Phase III only.

Land Use - 88150 sf event center, 2.8 acres non-asphalt surfaces, 0.33 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 420 days, coating 60 days. Construction adjusted to reflect overall construction period of 24 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less. Parking coating based on model default.

Vehicle Trips - Trip gen 13.613. Operational trips only projected to occur 30 days/year. Refer to separate spreadsheet for adjusted calculation of annual mobile-source emissions.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	300.00	420.00
tblConstructionPhase	PhaseEndDate	10/11/2021	9/26/2022
tblConstructionPhase	PhaseEndDate	8/9/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	8/10/2021	7/5/2022
tblLandUse	LotAcreage	2.02	7.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025

tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	13.61

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1615	1.6416	1.1325	2.2000e-003	0.2470	0.0763	0.3233	0.1103	0.0707	0.1810						195.7718
2021	0.3242	2.8605	2.7712	5.8700e-003	0.1650	0.1275	0.2925	0.0444	0.1199	0.1643						524.3563
2022	0.3971	1.3452	1.4252	3.0600e-003	0.0892	0.0566	0.1457	0.0240	0.0534	0.0774						273.4669
Maximum	**0.3971**	**2.8605**	**2.7712**	**5.8700e-003**	**0.2470**	**0.1275**	**0.3233**	**0.1103**	**0.1199**	**0.1810**						**524.3563**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0577	1.0033	1.2547	2.2000e-003	0.1105	0.0460	0.1565	0.0468	0.0460	0.0928						195.7716
2021	0.1641	2.4421	2.9406	5.8700e-003	0.1650	0.1203	0.2853	0.0444	0.1202	0.1646						524.3559
2022	0.3251	1.2526	1.5247	3.0600e-003	0.0892	0.0632	0.1523	0.0240	0.0631	0.0871						273.4667
Maximum	**0.3251**	**2.4421**	**2.9406**	**5.8700e-003**	**0.1650**	**0.1203**	**0.2853**	**0.0468**	**0.1202**	**0.1646**						**524.3559**

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**38.05**	**19.66**	**-7.34**	**0.00**	**27.25**	**11.88**	**21.99**	**35.53**	**6.03**	**18.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2020**	**11-30-2020**	1.4942	0.8257
2	**12-1-2020**	**2-28-2021**	0.8120	0.6477
3	**3-1-2021**	**5-31-2021**	0.8001	0.6545
4	**6-1-2021**	**8-31-2021**	0.7991	0.6535
5	**9-1-2021**	**11-30-2021**	0.7925	0.6484
6	**12-1-2021**	**2-28-2022**	0.7364	0.6363
7	**3-1-2022**	**5-31-2022**	0.7250	0.6454
8	**6-1-2022**	**8-31-2022**	0.4704	0.4369
9	**9-1-2022**	**9-30-2022**	0.0909	0.0891
		Highest	1.4942	0.8257

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4207	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003
Energy	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						290.4091
Mobile	0.2626	1.1378	3.3636	0.0110	1.0619	9.8800e-003	1.0718	0.2842	9.2500e-003	0.2935						1,005.9318
Waste						0.0000	0.0000		0.0000	0.0000						54.9722
Water						0.0000	0.0000		0.0000	0.0000						52.2833
Total	**0.6959**	**1.2522**	**3.4613**	**0.0117**	**1.0619**	**0.0186**	**1.0805**	**0.2842**	**0.0180**	**0.3022**						**1,403.5995**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3799	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003
Energy	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						290.4091
Mobile	0.2626	1.1378	3.3636	0.0110	1.0619	9.8800e-003	1.0718	0.2842	9.2500e-003	0.2935						1,005.9318
Waste						0.0000	0.0000		0.0000	0.0000						27.4861
Water						0.0000	0.0000		0.0000	0.0000						41.8266
Total	**0.6550**	**1.2522**	**3.4613**	**0.0117**	**1.0619**	**0.0186**	**1.0805**	**0.2842**	**0.0180**	**0.3022**						**1,365.6567**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.70**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	7/4/2022	5	420	
5	Architectural Coating	Architectural Coating	7/5/2022	9/26/2022	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 132,225; Non-Residential Outdoor: 44,075; Striped Parking Area: 10,533 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Scrapers	2	8.00	367	0.48
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	22.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	111.00	43.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	31.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4200e-003	0.0000	3.4200e-003	5.2000e-004	0.0000	5.2000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**3.4200e-003**	**0.0166**	**0.0200**	**5.2000e-004**	**0.0154**	**0.0159**						**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9900e-003	1.0800e-003	1.0000e-005	2.6000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005						1.1940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**7.9000e-004**	**5.5900e-003**	**6.2400e-003**	**2.0000e-005**	**1.7000e-003**	**3.0000e-005**	**1.7400e-003**	**4.5000e-004**	**3.0000e-005**	**4.8000e-004**						**2.4031**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3300e-003	0.0000	1.3300e-003	2.0000e-004	0.0000	2.0000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						34.2385
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.3300e-003**	**8.6300e-003**	**9.9600e-003**	**2.0000e-004**	**8.6300e-003**	**8.8300e-003**						**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9900e-003	1.0800e-003	1.0000e-005	2.6000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005						1.1940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**7.9000e-004**	**5.5900e-003**	**6.2400e-003**	**2.0000e-005**	**1.7000e-003**	**3.0000e-005**	**1.7400e-003**	**4.5000e-004**	**3.0000e-005**	**4.8000e-004**						**2.4031**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**						**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						16.8505
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0352**	**4.7300e-003**	**0.0400**	**0.0194**	**4.7300e-003**	**0.0241**						**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3872
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.1301**	**0.0326**	**0.1627**	**0.0540**	**0.0300**	**0.0840**						**82.3872**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210						0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195						82.3871
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0507**	**0.0195**	**0.0702**	**0.0210**	**0.0195**	**0.0405**						**82.3871**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6232
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6232**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.2400e-003	0.0627	0.0190	1.2000e-004	2.7300e-003	3.4000e-004	3.0800e-003	7.9000e-004	3.3000e-004	1.1200e-003						11.5992
Worker	6.8000e-003	6.1700e-003	0.0535	1.4000e-004	0.0150	1.0000e-004	0.0151	3.9800e-003	9.0000e-005	4.0700e-003						12.5263
Total	**9.0400e-003**	**0.0688**	**0.0724**	**2.6000e-004**	**0.0177**	**4.4000e-004**	**0.0181**	**4.7700e-003**	**4.2000e-004**	**5.1900e-003**						**24.1255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.4300e-003	0.1992	0.2502	3.8000e-004		0.0127	0.0127		0.0127	0.0127						32.6231
Total	**9.4300e-003**	**0.1992**	**0.2502**	**3.8000e-004**		**0.0127**	**0.0127**		**0.0127**	**0.0127**						**32.6231**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.2400e-003	0.0627	0.0190	1.2000e-004	2.7300e-003	3.4000e-004	3.0800e-003	7.9000e-004	3.3000e-004	1.1200e-003						11.5992
Worker	6.8000e-003	6.1700e-003	0.0535	1.4000e-004	0.0150	1.0000e-004	0.0151	3.9800e-003	9.0000e-005	4.0700e-003						12.5263
Total	**9.0400e-003**	**0.0688**	**0.0724**	**2.6000e-004**	**0.0177**	**4.4000e-004**	**0.0181**	**4.7700e-003**	**4.2000e-004**	**5.1900e-003**						**24.1255**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176						304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**						**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0171	0.5342	0.1565	1.1100e-003	0.0255	1.5200e-003	0.0270	7.3700e-003	1.4600e-003	8.8300e-003						107.4699
Worker	0.0590	0.0515	0.4516	1.2500e-003	0.1395	8.9000e-004	0.1403	0.0371	8.2000e-004	0.0379						112.7765
Total	**0.0762**	**0.5856**	**0.6081**	**2.3600e-003**	**0.1649**	**2.4100e-003**	**0.1674**	**0.0444**	**2.2800e-003**	**0.0467**						**220.2464**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0879	1.8565	2.3325	3.5100e-003		0.1179	0.1179		0.1179	0.1179						304.1095
Total	**0.0879**	**1.8565**	**2.3325**	**3.5100e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**						**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0171	0.5342	0.1565	1.1100e-003	0.0255	1.5200e-003	0.0270	7.3700e-003	1.4600e-003	8.8300e-003						107.4699
Worker	0.0590	0.0515	0.4516	1.2500e-003	0.1395	8.9000e-004	0.1403	0.0371	8.2000e-004	0.0379						112.7765
Total	**0.0762**	**0.5856**	**0.6081**	**2.3600e-003**	**0.1649**	**2.4100e-003**	**0.1674**	**0.0444**	**2.2800e-003**	**0.0467**						**220.2464**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1118	1.0228	1.0718	1.7600e-003		0.0530	0.0530		0.0499	0.0499						152.6891
Total	**0.1118**	**1.0228**	**1.0718**	**1.7600e-003**		**0.0530**	**0.0530**		**0.0499**	**0.0499**						**152.6891**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	7.9400e-003	0.2548	0.0725	5.5000e-004	0.0128	6.7000e-004	0.0135	3.7000e-003	6.4000e-004	4.3400e-003						53.5729
Worker	0.0278	0.0232	0.2076	6.0000e-004	0.0700	4.3000e-004	0.0704	0.0186	4.0000e-004	0.0190						54.5781
Total	**0.0358**	**0.2780**	**0.2802**	**1.1500e-003**	**0.0828**	**1.1000e-003**	**0.0839**	**0.0223**	**1.0400e-003**	**0.0233**						**108.1511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0441	0.9318	1.1707	1.7600e-003		0.0592	0.0592		0.0592	0.0592						152.6889
Total	**0.0441**	**0.9318**	**1.1707**	**1.7600e-003**		**0.0592**	**0.0592**		**0.0592**	**0.0592**						**152.6889**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	7.9400e-003	0.2548	0.0725	5.5000e-004	0.0128	6.7000e-004	0.0135	3.7000e-003	6.4000e-004	4.3400e-003						53.5729
Worker	0.0278	0.0232	0.2076	6.0000e-004	0.0700	4.3000e-004	0.0704	0.0186	4.0000e-004	0.0190						54.5781
Total	**0.0358**	**0.2780**	**0.2802**	**1.1500e-003**	**0.0828**	**1.1000e-003**	**0.0839**	**0.0223**	**1.0400e-003**	**0.0233**						**108.1511**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2409					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	6.1400e-003	0.0423	0.0544	9.0000e-005		2.4500e-003	2.4500e-003		2.4500e-003	2.4500e-003						7.6722
Total	**0.2470**	**0.0423**	**0.0544**	**9.0000e-005**		**2.4500e-003**	**2.4500e-003**		**2.4500e-003**	**2.4500e-003**						**7.6722**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.5300e-003	2.1100e-003	0.0189	5.0000e-005	6.3500e-003	4.0000e-005	6.3900e-003	1.6900e-003	4.0000e-005	1.7200e-003						4.9545
Total	**2.5300e-003**	**2.1100e-003**	**0.0189**	**5.0000e-005**	**6.3500e-003**	**4.0000e-005**	**6.3900e-003**	**1.6900e-003**	**4.0000e-005**	**1.7200e-003**						**4.9545**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2409					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.7800e-003	0.0407	0.0550	9.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003						7.6722
Total	**0.2427**	**0.0407**	**0.0550**	**9.0000e-005**		**2.8500e-003**	**2.8500e-003**		**2.8500e-003**	**2.8500e-003**						**7.6722**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.5300e-003	2.1100e-003	0.0189	5.0000e-005	6.3500e-003	4.0000e-005	6.3900e-003	1.6900e-003	4.0000e-005	1.7200e-003						4.9545
Total	**2.5300e-003**	**2.1100e-003**	**0.0189**	**5.0000e-005**	**6.3500e-003**	**4.0000e-005**	**6.3900e-003**	**1.6900e-003**	**4.0000e-005**	**1.7200e-003**						**4.9545**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2626	1.1378	3.3636	0.0110	1.0619	9.8800e-003	1.0718	0.2842	9.2500e-003	0.2935						1,005.9318
Unmitigated	0.2626	1.1378	3.3636	0.0110	1.0619	9.8800e-003	1.0718	0.2842	9.2500e-003	0.2935						1,005.9318

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,199.99	0.00	0.00	2,828,840	2,828,840
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,199.99	0.00	0.00	2,828,840	2,828,840

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Non-Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						165.1064
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						165.1064
NaturalGas Mitigated	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
NaturalGas Unmitigated	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.33421e+006	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0126**	**0.1144**	**0.0961**	**6.9000e-004**		**8.7000e-003**	**8.7000e-003**		**8.7000e-003**	**8.7000e-003**						**125.3027**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.33421e+006	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0126**	**0.1144**	**0.0961**	**6.9000e-004**		**8.7000e-003**	**8.7000e-003**		**8.7000e-003**	**8.7000e-003**						**125.3027**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	742223				165.1064
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**165.1064**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	742223				165.1064
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**165.1064**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3799	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003
Unmitigated	0.4207	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0650					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.3556					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003
Total	**0.4207**	**1.0000e-005**	**1.5500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						**3.2200e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0241					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.3556					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2200e-003
Total	**0.3799**	**1.0000e-005**	**1.5500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						**3.2200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				41.8266
Unmitigated				52.2833

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	20.3847 / 0				52.2833
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**52.2833**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	16.3077 / 0				41.8266
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**41.8266**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				27.4861
Unmitigated				54.9722

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	109.31				54.9722
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**54.9722**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	54.655				27.4861
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**27.4861**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase IV

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	60.00	1000sqft	1.38	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Annual

Project Characteristics - Phase IV only.

Land Use - 60000 sf greenhouse,

Construction Phase - Based on model defaults. site prep 2 days, grading 4 days, construction 550 days. Arch coating for greenhouse considered minimal.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating -

Vehicle Trips - No increase in mobile trips

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	550.00
tblConstructionPhase	PhaseEndDate	3/2/2020	8/31/2020
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1922	1.4391	1.0343	1.8300e-003	0.1207	0.0783	0.1990	0.0575	0.0748	0.1323						158.7106
2019	0.3183	2.2490	1.9343	3.4400e-003	0.0373	0.1209	0.1583	0.0101	0.1168	0.1268						292.3793
2020	0.1894	1.3858	1.2496	2.2900e-003	0.0249	0.0699	0.0948	6.7100e-003	0.0675	0.0742						192.9697
Maximum	**0.3183**	**2.2490**	**1.9343**	**3.4400e-003**	**0.1207**	**0.1209**	**0.1990**	**0.0575**	**0.1168**	**0.1323**						**292.3793**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0558	0.9172	1.0400	1.8300e-003	0.0581	0.0493	0.1074	0.0254	0.0493	0.0747						158.7104
2019	0.1054	1.7396	1.9332	3.4400e-003	0.0373	0.0969	0.1342	0.0101	0.0968	0.1069						292.3790
2020	0.0685	1.1499	1.2749	2.2900e-003	0.0249	0.0643	0.0892	6.7100e-003	0.0642	0.0710						192.9695
Maximum	**0.1054**	**1.7396**	**1.9332**	**3.4400e-003**	**0.0581**	**0.0969**	**0.1342**	**0.0254**	**0.0968**	**0.1069**						**292.3790**

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**67.18**	**24.97**	**-0.71**	**0.00**	**34.25**	**21.78**	**26.83**	**43.24**	**18.80**	**24.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2018**	**7-31-2018**	0.4542	0.1950
2	**8-1-2018**	**10-31-2018**	0.7070	0.4670
3	**11-1-2018**	**1-31-2019**	0.6871	0.4667
4	**2-1-2019**	**4-30-2019**	0.6251	0.4491
5	**5-1-2019**	**7-31-2019**	0.6455	0.4637
6	**8-1-2019**	**10-31-2019**	0.6458	0.4640
7	**11-1-2019**	**1-31-2020**	0.6291	0.4631
8	**2-1-2020**	**4-30-2020**	0.5818	0.4499
9	**5-1-2020**	**7-31-2020**	0.5942	0.4594
10	**8-1-2020**	**9-30-2020**	0.2002	0.1548
		Highest	0.7070	0.4670

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2761	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003
Energy	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						197.6521
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						37.4159
Water						0.0000	0.0000		0.0000	0.0000						35.5845
Total	**0.2847**	**0.0779**	**0.0664**	**4.7000e-004**	**0.0000**	**5.9200e-003**	**5.9200e-003**	**0.0000**	**5.9200e-003**	**5.9200e-003**						**270.6545**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2483	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003
Energy	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						197.6521
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						18.7079
Water						0.0000	0.0000		0.0000	0.0000						28.4676
Total	**0.2569**	**0.0779**	**0.0664**	**4.7000e-004**	**0.0000**	**5.9200e-003**	**5.9200e-003**	**0.0000**	**5.9200e-003**	**5.9200e-003**						**244.8297**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.54**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/29/2018	6/11/2018	5	2	
2	Grading	Grading	6/12/2018	7/23/2018	5	4	
3	Building Construction	Building Construction	7/24/2018	8/31/2020	5	550	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0290	0.0000	0.0290	0.0148	0.0000	0.0148						0.0000
Off-Road	9.0300e-003	0.1037	0.0404	9.0000e-005		4.7600e-003	4.7600e-003		4.3800e-003	4.3800e-003						7.9327
Total	**9.0300e-003**	**0.1037**	**0.0404**	**9.0000e-005**	**0.0290**	**4.7600e-003**	**0.0338**	**0.0148**	**4.3800e-003**	**0.0192**						**7.9327**

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e-004	2.1000e-004	1.7800e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004						0.3429
Total	**2.1000e-004**	**2.1000e-004**	**1.7800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3429**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	5.7600e-003	0.0000	5.7600e-003						0.0000
Off-Road	2.1100e-003	0.0420	0.0491	9.0000e-005		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003						7.9327
Total	**2.1100e-003**	**0.0420**	**0.0491**	**9.0000e-005**	**0.0113**	**1.8700e-003**	**0.0132**	**5.7600e-003**	**1.8700e-003**	**7.6300e-003**						**7.9327**

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e-004	2.1000e-004	1.7800e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004						0.3429
Total	**2.1000e-004**	**2.1000e-004**	**1.7800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3429**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0737	0.0000	0.0737	0.0379	0.0000	0.0379						0.0000
Off-Road	0.0225	0.2560	0.1015	2.1000e-004		0.0119	0.0119		0.0110	0.0110						19.4907
Total	**0.0225**	**0.2560**	**0.1015**	**2.1000e-004**	**0.0737**	**0.0119**	**0.0856**	**0.0379**	**0.0110**	**0.0489**						**19.4907**

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.4000e-004	6.2000e-004	5.3500e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004						1.0286
Total	**6.4000e-004**	**6.2000e-004**	**5.3500e-003**	**1.0000e-005**	**1.1600e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**						**1.0286**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0288	0.0000	0.0288	0.0148	0.0000	0.0148						0.0000
Off-Road	5.1700e-003	0.1035	0.1213	2.1000e-004		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003						19.4907
Total	**5.1700e-003**	**0.1035**	**0.1213**	**2.1000e-004**	**0.0288**	**4.6600e-003**	**0.0334**	**0.0148**	**4.6600e-003**	**0.0194**						**19.4907**

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.4000e-004	6.2000e-004	5.3500e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004						1.0286
Total	**6.4000e-004**	**6.2000e-004**	**5.3500e-003**	**1.0000e-005**	**1.1600e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**						**1.0286**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1490	1.0021	0.7979	1.2700e-003		0.0608	0.0608		0.0587	0.0587						106.4680
Total	**0.1490**	**1.0021**	**0.7979**	**1.2700e-003**		**0.0608**	**0.0608**		**0.0587**	**0.0587**						**106.4680**

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.0900e-003	0.0690	0.0233	1.2000e-004	2.6100e-003	6.4000e-004	3.2500e-003	7.5000e-004	6.1000e-004	1.3700e-003						11.1257
Worker	7.6900e-003	7.4100e-003	0.0641	1.4000e-004	0.0138	1.0000e-004	0.0139	3.6800e-003	9.0000e-005	3.7700e-003						12.3220
Total	**0.0108**	**0.0764**	**0.0874**	**2.6000e-004**	**0.0165**	**7.4000e-004**	**0.0172**	**4.4300e-003**	**7.0000e-004**	**5.1400e-003**						**23.4476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0368	0.6944	0.7750	1.2700e-003		0.0421	0.0421		0.0421	0.0421						106.4679
Total	**0.0368**	**0.6944**	**0.7750**	**1.2700e-003**		**0.0421**	**0.0421**		**0.0421**	**0.0421**						**106.4679**

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.0900e-003	0.0690	0.0233	1.2000e-004	2.6100e-003	6.4000e-004	3.2500e-003	7.5000e-004	6.1000e-004	1.3700e-003						11.1257
Worker	7.6900e-003	7.4100e-003	0.0641	1.4000e-004	0.0138	1.0000e-004	0.0139	3.6800e-003	9.0000e-005	3.7700e-003						12.3220
Total	**0.0108**	**0.0764**	**0.0874**	**2.6000e-004**	**0.0165**	**7.4000e-004**	**0.0172**	**4.4300e-003**	**7.0000e-004**	**5.1400e-003**						**23.4476**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2965	2.0854	1.7601	2.8800e-003		0.1195	0.1195		0.1154	0.1154						240.0570
Total	**0.2965**	**2.0854**	**1.7601**	**2.8800e-003**		**0.1195**	**0.1195**		**0.1154**	**0.1154**						**240.0570**

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.1100e-003	0.1489	0.0467	2.6000e-004	5.9300e-003	1.1900e-003	7.1200e-003	1.7100e-003	1.1400e-003	2.8500e-003						25.1815
Worker	0.0157	0.0147	0.1275	3.0000e-004	0.0314	2.1000e-004	0.0316	8.3500e-003	2.0000e-004	8.5400e-003						27.1408
Total	**0.0218**	**0.1636**	**0.1742**	**5.6000e-004**	**0.0373**	**1.4000e-003**	**0.0387**	**0.0101**	**1.3400e-003**	**0.0114**						**52.3222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0836	1.5760	1.7590	2.8800e-003		0.0955	0.0955		0.0955	0.0955						240.0568
Total	**0.0836**	**1.5760**	**1.7590**	**2.8800e-003**		**0.0955**	**0.0955**		**0.0955**	**0.0955**						**240.0568**

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.1100e-003	0.1489	0.0467	2.6000e-004	5.9300e-003	1.1900e-003	7.1200e-003	1.7100e-003	1.1400e-003	2.8500e-003						25.1815
Worker	0.0157	0.0147	0.1275	3.0000e-004	0.0314	2.1000e-004	0.0316	8.3500e-003	2.0000e-004	8.5400e-003						27.1408
Total	**0.0218**	**0.1636**	**0.1742**	**5.6000e-004**	**0.0373**	**1.4000e-003**	**0.0387**	**0.0101**	**1.3400e-003**	**0.0114**						**52.3222**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1767	1.2866	1.1474	1.9200e-003		0.0693	0.0693		0.0669	0.0669						158.6747
Total	**0.1767**	**1.2866**	**1.1474**	**1.9200e-003**		**0.0693**	**0.0693**		**0.0669**	**0.0669**						**158.6747**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.2400e-003	0.0906	0.0274	1.7000e-004	3.9500e-003	4.9000e-004	4.4500e-003	1.1400e-003	4.7000e-004	1.6100e-003						16.7630
Worker	9.5100e-003	8.6400e-003	0.0748	1.9000e-004	0.0209	1.4000e-004	0.0211	5.5600e-003	1.3000e-004	5.6900e-003						17.5320
Total	**0.0128**	**0.0992**	**0.1023**	**3.6000e-004**	**0.0249**	**6.3000e-004**	**0.0255**	**6.7000e-003**	**6.0000e-004**	**7.3000e-003**						**34.2950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0557	1.0507	1.1726	1.9200e-003		0.0636	0.0636		0.0636	0.0636						158.6745
Total	**0.0557**	**1.0507**	**1.1726**	**1.9200e-003**		**0.0636**	**0.0636**		**0.0636**	**0.0636**						**158.6745**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.2400e-003	0.0906	0.0274	1.7000e-004	3.9500e-003	4.9000e-004	4.4500e-003	1.1400e-003	4.7000e-004	1.6100e-003						16.7630
Worker	9.5100e-003	8.6400e-003	0.0748	1.9000e-004	0.0209	1.4000e-004	0.0211	5.5600e-003	1.3000e-004	5.6900e-003						17.5320
Total	**0.0128**	**0.0992**	**0.1023**	**3.6000e-004**	**0.0249**	**6.3000e-004**	**0.0255**	**6.7000e-003**	**6.0000e-004**	**7.3000e-003**						**34.2950**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						112.3638
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						112.3638
NaturalGas Mitigated	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
NaturalGas Unmitigated	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.5888e+006	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
Total		**8.5700e-003**	**0.0779**	**0.0654**	**4.7000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**						**85.2883**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.5888e+006	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
Total		**8.5700e-003**	**0.0779**	**0.0654**	**4.7000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**						**85.2883**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	505200				112.3638
Total					**112.3638**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	505200				112.3638
Total					**112.3638**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2483	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003
Unmitigated	0.2761	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003
Total	**0.2761**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.1000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.1000e-003
Total	**0.2483**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.1000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				28.4676
Unmitigated				35.5845

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	13.875 / 0				35.5845
Total					**35.5845**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	11.1 / 0				28.4676
Total					**28.4676**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				18.7079
Unmitigated				37.4159

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	74.4				37.4159
Total					**37.4159**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	37.2				18.7079
Total					**18.7079**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase I

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.49	1000sqft	23.30	9,486.00	0
Other Non-Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	546.6	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Summer

Project Characteristics - Phase I only.

Land Use - 9.486sf of building area, 1.7 acres other/non-asphalt surfaces

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 35 days, construction 90 days, coating 20 days. Construction adjusted to reflect overall construction period of 8 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	4,443.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	90.00
tblLandUse	BuildingSpaceSquareFeet	9,490.00	9,486.00
tblLandUse	LandUseSquareFeet	9,490.00	9,486.00
tblLandUse	LotAcreage	0.22	23.30
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	546.6

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Summer

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleEF	HHD	0.39	0.46
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	0.06	0.20
tblVehicleEF	HHD	1.46	3.11
tblVehicleEF	HHD	1.01	1.40
tblVehicleEF	HHD	3.18	7.02
tblVehicleEF	HHD	3,993.92	3,901.28
tblVehicleEF	HHD	1,552.42	1,752.25
tblVehicleEF	HHD	9.72	18.52
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	12.83	22.99
tblVehicleEF	HHD	1.77	6.34
tblVehicleEF	HHD	19.58	19.11
tblVehicleEF	HHD	5.7020e-003	0.07
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	6.7930e-003	0.06
tblVehicleEF	HHD	9.7000e-005	4.6500e-004
tblVehicleEF	HHD	5.4550e-003	0.07
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8760e-003	8.7260e-003
tblVehicleEF	HHD	6.4990e-003	0.06
tblVehicleEF	HHD	9.0000e-005	4.3700e-004
tblVehicleEF	HHD	8.3000e-005	2.6600e-004
tblVehicleEF	HHD	4.4280e-003	0.02
tblVehicleEF	HHD	0.37	0.86

tblVehicleEF	HHD	5.9000e-005	1.6700e-004
tblVehicleEF	HHD	0.08	0.21
tblVehicleEF	HHD	5.0800e-004	2.0520e-003
tblVehicleEF	HHD	0.06	0.30
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	1.4900e-004	3.0500e-004
tblVehicleEF	HHD	8.3000e-005	2.6600e-004
tblVehicleEF	HHD	4.4280e-003	0.02
tblVehicleEF	HHD	0.44	0.99
tblVehicleEF	HHD	5.9000e-005	1.6700e-004
tblVehicleEF	HHD	0.18	0.30
tblVehicleEF	HHD	5.0800e-004	2.0520e-003
tblVehicleEF	HHD	0.07	0.33
tblVehicleEF	HHD	0.37	0.43
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	0.06	0.19
tblVehicleEF	HHD	1.06	2.29
tblVehicleEF	HHD	1.01	1.41
tblVehicleEF	HHD	2.97	6.56
tblVehicleEF	HHD	4,230.87	4,126.42
tblVehicleEF	HHD	1,552.42	1,752.25
tblVehicleEF	HHD	9.72	18.52
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	13.24	23.71
tblVehicleEF	HHD	1.71	6.14
tblVehicleEF	HHD	19.57	19.08

tblVehicleEF	HHD	4.8570e-003	0.06
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	6.7930e-003	0.06
tblVehicleEF	HHD	9.7000e-005	4.6500e-004
tblVehicleEF	HHD	4.6470e-003	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8760e-003	8.7260e-003
tblVehicleEF	HHD	6.4990e-003	0.06
tblVehicleEF	HHD	9.0000e-005	4.3700e-004
tblVehicleEF	HHD	1.4200e-004	5.0200e-004
tblVehicleEF	HHD	4.5270e-003	0.02
tblVehicleEF	HHD	0.35	0.82
tblVehicleEF	HHD	9.7000e-005	3.0700e-004
tblVehicleEF	HHD	0.08	0.21
tblVehicleEF	HHD	4.8100e-004	1.9980e-003
tblVehicleEF	HHD	0.06	0.28
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	1.4500e-004	2.9700e-004
tblVehicleEF	HHD	1.4200e-004	5.0200e-004
tblVehicleEF	HHD	4.5270e-003	0.02
tblVehicleEF	HHD	0.41	0.94
tblVehicleEF	HHD	9.7000e-005	3.0700e-004
tblVehicleEF	HHD	0.18	0.30
tblVehicleEF	HHD	4.8100e-004	1.9980e-003
tblVehicleEF	HHD	0.06	0.31

tblVehicleEF	HHD	0.42	0.49
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	0.06	0.21
tblVehicleEF	HHD	2.00	4.24
tblVehicleEF	HHD	1.00	1.40
tblVehicleEF	HHD	3.29	7.30
tblVehicleEF	HHD	3,666.70	3,590.36
tblVehicleEF	HHD	1,552.42	1,752.25
tblVehicleEF	HHD	9.72	18.52
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	12.26	22.00
tblVehicleEF	HHD	1.75	6.29
tblVehicleEF	HHD	19.59	19.13
tblVehicleEF	HHD	6.8680e-003	0.09
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	6.7930e-003	0.06
tblVehicleEF	HHD	9.7000e-005	4.6500e-004
tblVehicleEF	HHD	6.5710e-003	0.08
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8760e-003	8.7260e-003
tblVehicleEF	HHD	6.4990e-003	0.06
tblVehicleEF	HHD	9.0000e-005	4.3700e-004
tblVehicleEF	HHD	6.1000e-005	1.8800e-004
tblVehicleEF	HHD	4.5800e-003	0.02
tblVehicleEF	HHD	0.40	0.92
tblVehicleEF	HHD	4.7000e-005	1.2800e-004

tblVehicleEF	HHD	0.08	0.21
tblVehicleEF	HHD	5.6500e-004	2.2180e-003
tblVehicleEF	HHD	0.06	0.31
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	1.5100e-004	3.1000e-004
tblVehicleEF	HHD	6.1000e-005	1.8800e-004
tblVehicleEF	HHD	4.5800e-003	0.02
tblVehicleEF	HHD	0.47	1.06
tblVehicleEF	HHD	4.7000e-005	1.2800e-004
tblVehicleEF	HHD	0.18	0.30
tblVehicleEF	HHD	5.6500e-004	2.2180e-003
tblVehicleEF	HHD	0.07	0.34
tblVehicleEF	LDA	2.1230e-003	7.0230e-003
tblVehicleEF	LDA	2.7780e-003	0.01
tblVehicleEF	LDA	0.34	0.78
tblVehicleEF	LDA	0.76	2.38
tblVehicleEF	LDA	178.30	279.10
tblVehicleEF	LDA	42.95	65.30
tblVehicleEF	LDA	0.61	0.54
tblVehicleEF	LDA	0.03	0.09
tblVehicleEF	LDA	0.04	0.17
tblVehicleEF	LDA	1.1450e-003	1.8280e-003
tblVehicleEF	LDA	1.9090e-003	2.5040e-003
tblVehicleEF	LDA	1.0540e-003	1.6910e-003
tblVehicleEF	LDA	1.7550e-003	2.3050e-003
tblVehicleEF	LDA	0.02	0.05

tblVehicleEF	LDA	0.07	0.15
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	5.3200e-003	0.02
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.04	0.18
tblVehicleEF	LDA	1.7840e-003	2.7970e-003
tblVehicleEF	LDA	4.4200e-004	6.9500e-004
tblVehicleEF	LDA	0.02	0.05
tblVehicleEF	LDA	0.07	0.15
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	7.7390e-003	0.03
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	2.2570e-003	7.4090e-003
tblVehicleEF	LDA	2.4200e-003	0.01
tblVehicleEF	LDA	0.37	0.85
tblVehicleEF	LDA	0.63	1.98
tblVehicleEF	LDA	185.80	290.91
tblVehicleEF	LDA	42.95	65.30
tblVehicleEF	LDA	0.61	0.54
tblVehicleEF	LDA	0.03	0.08
tblVehicleEF	LDA	0.04	0.16
tblVehicleEF	LDA	1.1450e-003	1.8280e-003
tblVehicleEF	LDA	1.9090e-003	2.5040e-003
tblVehicleEF	LDA	1.0540e-003	1.6910e-003
tblVehicleEF	LDA	1.7550e-003	2.3050e-003
tblVehicleEF	LDA	0.03	0.08

tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	5.6490e-003	0.02
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.03	0.15
tblVehicleEF	LDA	1.8600e-003	2.9160e-003
tblVehicleEF	LDA	4.4000e-004	6.8800e-004
tblVehicleEF	LDA	0.03	0.08
tblVehicleEF	LDA	0.07	0.16
tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	8.2200e-003	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.17
tblVehicleEF	LDA	2.0870e-003	6.9310e-003
tblVehicleEF	LDA	2.9380e-003	0.01
tblVehicleEF	LDA	0.33	0.77
tblVehicleEF	LDA	0.82	2.57
tblVehicleEF	LDA	176.81	276.74
tblVehicleEF	LDA	42.95	65.30
tblVehicleEF	LDA	0.61	0.54
tblVehicleEF	LDA	0.03	0.09
tblVehicleEF	LDA	0.04	0.18
tblVehicleEF	LDA	1.1450e-003	1.8280e-003
tblVehicleEF	LDA	1.9090e-003	2.5040e-003
tblVehicleEF	LDA	1.0540e-003	1.6910e-003
tblVehicleEF	LDA	1.7550e-003	2.3050e-003
tblVehicleEF	LDA	0.01	0.04

tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	0.01	0.03
tblVehicleEF	LDA	5.2290e-003	0.02
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	1.7690e-003	2.7740e-003
tblVehicleEF	LDA	4.4300e-004	6.9800e-004
tblVehicleEF	LDA	0.01	0.04
tblVehicleEF	LDA	0.07	0.17
tblVehicleEF	LDA	0.01	0.03
tblVehicleEF	LDA	7.6070e-003	0.03
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDT1	4.2290e-003	0.02
tblVehicleEF	LDT1	5.7830e-003	0.03
tblVehicleEF	LDT1	0.54	2.05
tblVehicleEF	LDT1	1.35	4.91
tblVehicleEF	LDT1	222.02	335.56
tblVehicleEF	LDT1	53.66	78.67
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.06	0.23
tblVehicleEF	LDT1	0.07	0.29
tblVehicleEF	LDT1	1.3450e-003	2.8940e-003
tblVehicleEF	LDT1	2.1860e-003	3.8670e-003
tblVehicleEF	LDT1	1.2370e-003	2.6820e-003
tblVehicleEF	LDT1	2.0100e-003	3.5700e-003
tblVehicleEF	LDT1	0.04	0.10

tblVehicleEF	LDT1	0.12	0.29
tblVehicleEF	LDT1	0.03	0.08
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	0.09	0.18
tblVehicleEF	LDT1	0.08	0.36
tblVehicleEF	LDT1	2.2250e-003	3.3840e-003
tblVehicleEF	LDT1	5.5900e-004	8.7400e-004
tblVehicleEF	LDT1	0.04	0.10
tblVehicleEF	LDT1	0.12	0.29
tblVehicleEF	LDT1	0.03	0.08
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	0.09	0.18
tblVehicleEF	LDT1	0.09	0.40
tblVehicleEF	LDT1	4.4730e-003	0.02
tblVehicleEF	LDT1	5.0190e-003	0.02
tblVehicleEF	LDT1	0.58	2.15
tblVehicleEF	LDT1	1.12	4.06
tblVehicleEF	LDT1	231.19	348.99
tblVehicleEF	LDT1	53.66	78.67
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.05	0.20
tblVehicleEF	LDT1	0.07	0.26
tblVehicleEF	LDT1	1.3450e-003	2.8940e-003
tblVehicleEF	LDT1	2.1860e-003	3.8670e-003
tblVehicleEF	LDT1	1.2370e-003	2.6820e-003
tblVehicleEF	LDT1	2.0100e-003	3.5700e-003
tblVehicleEF	LDT1	0.07	0.18

tblVehicleEF	LDT1	0.12	0.30
tblVehicleEF	LDT1	0.06	0.13
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	0.08	0.17
tblVehicleEF	LDT1	0.07	0.31
tblVehicleEF	LDT1	2.3170e-003	3.5190e-003
tblVehicleEF	LDT1	5.5600e-004	8.5900e-004
tblVehicleEF	LDT1	0.07	0.18
tblVehicleEF	LDT1	0.12	0.30
tblVehicleEF	LDT1	0.06	0.13
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	0.08	0.17
tblVehicleEF	LDT1	0.07	0.34
tblVehicleEF	LDT1	4.1610e-003	0.02
tblVehicleEF	LDT1	6.1250e-003	0.03
tblVehicleEF	LDT1	0.53	2.05
tblVehicleEF	LDT1	1.46	5.32
tblVehicleEF	LDT1	220.20	332.88
tblVehicleEF	LDT1	53.66	78.67
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.06	0.23
tblVehicleEF	LDT1	0.08	0.30
tblVehicleEF	LDT1	1.3450e-003	2.8940e-003
tblVehicleEF	LDT1	2.1860e-003	3.8670e-003
tblVehicleEF	LDT1	1.2370e-003	2.6820e-003
tblVehicleEF	LDT1	2.0100e-003	3.5700e-003
tblVehicleEF	LDT1	0.03	0.08

tblVehicleEF	LDT1	0.13	0.33
tblVehicleEF	LDT1	0.03	0.06
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	0.11	0.22
tblVehicleEF	LDT1	0.08	0.39
tblVehicleEF	LDT1	2.2070e-003	3.3570e-003
tblVehicleEF	LDT1	5.6100e-004	8.8100e-004
tblVehicleEF	LDT1	0.03	0.08
tblVehicleEF	LDT1	0.13	0.33
tblVehicleEF	LDT1	0.03	0.06
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	0.11	0.22
tblVehicleEF	LDT1	0.09	0.42
tblVehicleEF	LDT2	4.4040e-003	0.01
tblVehicleEF	LDT2	5.8600e-003	0.02
tblVehicleEF	LDT2	0.59	1.50
tblVehicleEF	LDT2	1.37	4.23
tblVehicleEF	LDT2	271.35	390.62
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.10	0.42
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.04	0.08

tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	2.7180e-003	3.9240e-003
tblVehicleEF	LDT2	6.7800e-004	9.9000e-004
tblVehicleEF	LDT2	0.04	0.08
tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LDT2	4.6700e-003	0.02
tblVehicleEF	LDT2	5.1140e-003	0.02
tblVehicleEF	LDT2	0.64	1.60
tblVehicleEF	LDT2	1.15	3.52
tblVehicleEF	LDT2	282.44	406.52
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.10	0.38
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.07	0.13

tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	2.8300e-003	4.0840e-003
tblVehicleEF	LDT2	6.7500e-004	9.7800e-004
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	4.3310e-003	0.01
tblVehicleEF	LDT2	6.1920e-003	0.03
tblVehicleEF	LDT2	0.59	1.48
tblVehicleEF	LDT2	1.47	4.58
tblVehicleEF	LDT2	269.14	387.45
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.11	0.44
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.03	0.06

tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	2.6960e-003	3.8920e-003
tblVehicleEF	LDT2	6.8000e-004	9.9600e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.93	1.79
tblVehicleEF	LHD1	1.87	3.06
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.63	3.11
tblVehicleEF	LHD1	0.78	0.95
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9300e-004	3.3000e-004
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.20	0.33
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02

tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.94	1.82
tblVehicleEF	LHD1	1.75	2.86
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.57	3.00
tblVehicleEF	LHD1	0.74	0.89
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.18	0.29
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003

tblVehicleEF	LHD1	2.9100e-004	3.2600e-004
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.16	0.25
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.19	0.32
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.92	1.78
tblVehicleEF	LHD1	1.93	3.16
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.62	3.08
tblVehicleEF	LHD1	0.81	0.98
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8650e-003
tblVehicleEF	LHD1	2.9400e-004	3.3200e-004
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.21	0.34
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0770e-003	0.01
tblVehicleEF	LHD2	3.6530e-003	9.9930e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.82	1.29
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14

tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.60	2.72
tblVehicleEF	LHD2	0.28	0.49
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004

tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.1140e-003	0.01
tblVehicleEF	LHD2	3.5240e-003	9.5060e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.03
tblVehicleEF	LHD2	0.77	1.21
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.58	2.63
tblVehicleEF	LHD2	0.27	0.46
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
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tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0570e-003	0.01
tblVehicleEF	LHD2	3.7240e-003	0.01
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.84	1.33
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.59	2.70
tblVehicleEF	LHD2	0.28	0.50

tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	MCY	0.43	0.39
tblVehicleEF	MCY	0.16	0.18

tblVehicleEF	MCY	18.71	23.95
tblVehicleEF	MCY	10.37	10.07
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.17	1.23
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.14	2.47
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.25	2.47
tblVehicleEF	MCY	2.0370e-003	2.0600e-003
tblVehicleEF	MCY	6.9300e-004	7.4100e-004
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.66	2.94
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.44	2.68
tblVehicleEF	MCY	0.42	0.37
tblVehicleEF	MCY	0.14	0.15

tblVehicleEF	MCY	17.66	22.30
tblVehicleEF	MCY	9.19	9.05
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.06	1.11
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.07	2.34
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	1.93	2.09
tblVehicleEF	MCY	2.0180e-003	2.0290e-003
tblVehicleEF	MCY	6.6500e-004	7.1300e-004
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.57	2.79
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	2.10	2.27
tblVehicleEF	MCY	0.44	0.40
tblVehicleEF	MCY	0.18	0.19

tblVehicleEF	MCY	19.44	25.08
tblVehicleEF	MCY	10.99	10.63
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.18	1.24
tblVehicleEF	MCY	0.33	0.34
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.18	2.55
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.41	2.66
tblVehicleEF	MCY	2.0500e-003	2.0800e-003
tblVehicleEF	MCY	7.0800e-004	7.5600e-004
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.71	3.03
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.62	2.89
tblVehicleEF	MDV	7.1160e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.79	2.10
tblVehicleEF	MDV	2.28	5.67
tblVehicleEF	MDV	365.97	513.88
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.21	0.60
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.16	0.47
tblVehicleEF	MDV	3.6620e-003	5.1620e-003
tblVehicleEF	MDV	9.1900e-004	1.2860e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.18	0.52
tblVehicleEF	MDV	7.5450e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.85	2.21
tblVehicleEF	MDV	1.91	4.74
tblVehicleEF	MDV	380.55	534.42
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.10	0.29
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.14	0.41
tblVehicleEF	MDV	3.8090e-003	5.3690e-003
tblVehicleEF	MDV	9.1300e-004	1.2690e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.15	0.45
tblVehicleEF	MDV	6.9970e-003	0.02
tblVehicleEF	MDV	0.01	0.04

tblVehicleEF	MDV	0.78	2.09
tblVehicleEF	MDV	2.45	6.12
tblVehicleEF	MDV	363.07	509.79
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.22	0.63
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.17	0.50
tblVehicleEF	MDV	3.6330e-003	5.1210e-003
tblVehicleEF	MDV	9.2200e-004	1.2940e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04

tblVehicleEF	MH	0.87	6.14
tblVehicleEF	MH	4.40	9.22
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.40	2.39
tblVehicleEF	MH	0.77	1.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.58
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3900e-004	8.0700e-004
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.29	0.64

tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.89	6.17
tblVehicleEF	MH	4.08	8.53
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.34	2.26
tblVehicleEF	MH	0.73	1.02
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.07	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.25	0.55
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3300e-004	7.9500e-004
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.09	0.34

tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.28	0.60
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.86	6.15
tblVehicleEF	MH	4.54	9.55
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.39	2.38
tblVehicleEF	MH	0.80	1.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.60
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4100e-004	8.1300e-004
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14

tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.30	0.66
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9950e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.35	0.60
tblVehicleEF	MHD	0.27	1.36
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tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.45	1.39
tblVehicleEF	MHD	1.26	4.34
tblVehicleEF	MHD	11.30	10.90
tblVehicleEF	MHD	1.2800e-004	8.2220e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.2300e-004	7.8670e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	4.0300e-004	9.4500e-004

tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.73
tblVehicleEF	MHD	1.4160e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9900e-004	8.6500e-004
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.26	0.79
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	3.0230e-003	0.02
tblVehicleEF	MHD	0.03	0.09
tblVehicleEF	MHD	0.23	0.41
tblVehicleEF	MHD	0.27	1.37
tblVehicleEF	MHD	3.61	11.15
tblVehicleEF	MHD	156.26	151.37
tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.46	1.43
tblVehicleEF	MHD	1.22	4.18
tblVehicleEF	MHD	11.27	10.81
tblVehicleEF	MHD	1.0800e-004	6.9320e-003

tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.0300e-004	6.6320e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.23	0.69
tblVehicleEF	MHD	1.5010e-003	1.4560e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9400e-004	8.5100e-004
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.25	0.75
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9790e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.44	0.77
tblVehicleEF	MHD	0.27	1.35

tblVehicleEF	MHD	4.01	12.41
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tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.43	1.32
tblVehicleEF	MHD	1.25	4.30
tblVehicleEF	MHD	11.32	10.95
tblVehicleEF	MHD	1.5600e-004	0.01
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.4900e-004	9.5720e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.75
tblVehicleEF	MHD	1.3040e-003	1.2660e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.0100e-004	8.7300e-004
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.03	0.07

tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.27	0.82
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7130e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.24	0.28
tblVehicleEF	OBUS	0.37	1.36
tblVehicleEF	OBUS	4.77	8.89
tblVehicleEF	OBUS	136.21	95.08
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.31	0.62
tblVehicleEF	OBUS	1.08	2.82
tblVehicleEF	OBUS	3.70	3.21
tblVehicleEF	OBUS	2.8000e-005	3.6900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.7000e-005	3.5300e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004

tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.30	0.56
tblVehicleEF	OBUS	1.3110e-003	9.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	8.6600e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.33	0.61
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7950e-003	0.02
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.23	0.26
tblVehicleEF	OBUS	0.38	1.39
tblVehicleEF	OBUS	4.43	8.26
tblVehicleEF	OBUS	143.39	99.72
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.32	0.64
tblVehicleEF	OBUS	1.04	2.71
tblVehicleEF	OBUS	3.65	3.12
tblVehicleEF	OBUS	2.4000e-005	3.1100e-004

tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.3000e-005	2.9800e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.28	0.53
tblVehicleEF	OBUS	1.3790e-003	9.6400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0600e-004	8.5500e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.31	0.58
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.6690e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.25	0.30
tblVehicleEF	OBUS	0.37	1.35

tblVehicleEF	OBUS	4.92	9.18
tblVehicleEF	OBUS	126.30	88.68
tblVehicleEF	OBUS	1,284.15	1,343.57
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tblVehicleEF	OBUS	1.07	2.80
tblVehicleEF	OBUS	3.72	3.25
tblVehicleEF	OBUS	3.4000e-005	4.4900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	3.3000e-005	4.3000e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
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tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.31	0.57
tblVehicleEF	OBUS	1.2160e-003	8.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1400e-004	8.7100e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.33	0.63
tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.19
tblVehicleEF	SBUS	6.62	7.35
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tblVehicleEF	SBUS	1,145.19	1,180.91
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.70	12.02
tblVehicleEF	SBUS	2.23	6.23
tblVehicleEF	SBUS	13.61	14.11
tblVehicleEF	SBUS	2.9560e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.8280e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
tblVehicleEF	SBUS	0.03	0.09

tblVehicleEF	SBUS	0.78	0.88
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
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tblVehicleEF	SBUS	5.9100e-004	8.7900e-004
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tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
tblVehicleEF	SBUS	0.11	0.29
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tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.07	0.17
tblVehicleEF	SBUS	6.54	7.20
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tblVehicleEF	SBUS	6.36	17.53
tblVehicleEF	SBUS	1,199.90	1,236.25
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tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.88	12.40
tblVehicleEF	SBUS	2.15	5.99

tblVehicleEF	SBUS	13.58	14.02
tblVehicleEF	SBUS	2.4920e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.3840e-003	0.01
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.87
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
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tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.91
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6500e-004	8.1000e-004
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.99
tblVehicleEF	SBUS	0.81	0.83

tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.20
tblVehicleEF	SBUS	6.73	7.56
tblVehicleEF	SBUS	0.75	3.14
tblVehicleEF	SBUS	8.48	23.35
tblVehicleEF	SBUS	1,069.66	1,104.48
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.45	11.49
tblVehicleEF	SBUS	2.21	6.19
tblVehicleEF	SBUS	13.62	14.15
tblVehicleEF	SBUS	3.5960e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	3.4410e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	0.79	0.88
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	1.07

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.0100e-004	9.0600e-004
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	1.14	1.27
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	1.17
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	2.01	4.92
tblVehicleEF	UBUS	8.63	9.83
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.51	10.43
tblVehicleEF	UBUS	12.44	14.50
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06

tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.74
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5480e-003	1.3050e-003
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.20	0.85
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.81
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	2.02	4.97
tblVehicleEF	UBUS	7.31	8.16
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.38	10.08
tblVehicleEF	UBUS	12.37	14.43
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004

tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.70	0.66
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5240e-003	1.2760e-003
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.20	0.86
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.72
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.06
tblVehicleEF	UBUS	2.01	4.90
tblVehicleEF	UBUS	9.27	10.63
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.48	10.34
tblVehicleEF	UBUS	12.48	14.53
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25

tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.16	0.68
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.81	0.78
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5590e-003	1.3190e-003
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.20	0.84
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.89	0.85
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.8676	68.0465	39.8382	0.0641	18.2442	3.0741	21.1241	9.9779	2.8282	12.6273						6,595.5944
Maximum	**5.8676**	**68.0465**	**39.8382**	**0.0641**	**18.2442**	**3.0741**	**21.1241**	**9.9779**	**2.8282**	**12.6273**						**6,595.5944**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	2.2996	30.0851	37.7782	0.0641	7.2238	1.3009	8.1712	3.9202	1.3007	4.8675						6,595.5944
Maximum	**2.2996**	**30.0851**	**37.7782**	**0.0641**	**7.2238**	**1.3009**	**8.1712**	**3.9202**	**1.3007**	**4.8675**						**6,595.5944**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**60.81**	**55.79**	**5.17**	**0.00**	**60.41**	**57.68**	**61.32**	**60.71**	**54.01**	**61.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2739	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Energy	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.2814**	**0.0675**	**0.0578**	**4.0000e-004**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**0.0000**	**5.1300e-003**	**5.1300e-003**						**81.4473**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2499	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Energy	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.2573**	**0.0675**	**0.0578**	**4.0000e-004**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**0.0000**	**5.1300e-003**	**5.1300e-003**						**81.4473**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**8.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2017	5/26/2017	5	20	
2	Site Preparation	Site Preparation	5/27/2017	6/9/2017	5	10	
3	Grading	Grading	6/10/2017	7/28/2017	5	35	
4	Building Construction	Building Construction	7/29/2017	12/1/2017	5	90	
5	Architectural Coating	Architectural Coating	12/2/2017	12/29/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 1.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,229; Non-Residential Outdoor: 4,743; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Rubber Tired Dozers	3	8.00	247	0.40
	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	7.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4634	0.0000	0.4634	0.0702	0.0000	0.0702						0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425						3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**0.4634**	**2.1935**	**2.6569**	**0.0702**	**2.0425**	**2.1127**						**3,951.1070**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0289	0.8156	0.1880	1.6700e-003	0.0357	7.8600e-003	0.0436	9.7800e-003	7.5200e-003	0.0173						179.3538
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0895	0.0802	0.7917	1.5200e-003	0.1483	1.0700e-003	0.1494	0.0393	9.9000e-004	0.0403						151.5799
Total	**0.1184**	**0.8958**	**0.9797**	**3.1900e-003**	**0.1840**	**8.9300e-003**	**0.1930**	**0.0491**	**8.5100e-003**	**0.0576**						**330.9337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1807	0.0000	0.1807	0.0274	0.0000	0.0274						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,951.1070
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1807**	**0.8627**	**1.0434**	**0.0274**	**0.8627**	**0.8901**						**3,951.1070**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0289	0.8156	0.1880	1.6700e-003	0.0357	7.8600e-003	0.0436	9.7800e-003	7.5200e-003	0.0173						179.3538
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0895	0.0802	0.7917	1.5200e-003	0.1483	1.0700e-003	0.1494	0.0393	9.9000e-004	0.0403						151.5799
Total	**0.1184**	**0.8958**	**0.9797**	**3.1900e-003**	**0.1840**	**8.9300e-003**	**0.1930**	**0.0491**	**8.5100e-003**	**0.0576**						**330.9337**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483						3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**						**3,924.7852**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1074	0.0962	0.9501	1.8300e-003	0.1780	1.2800e-003	0.1792	0.0472	1.1900e-003	0.0484						181.8959
Total	**0.1074**	**0.0962**	**0.9501**	**1.8300e-003**	**0.1780**	**1.2800e-003**	**0.1792**	**0.0472**	**1.1900e-003**	**0.0484**						**181.8959**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,924.7852
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,924.7852**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1074	0.0962	0.9501	1.8300e-003	0.1780	1.2800e-003	0.1792	0.0472	1.1900e-003	0.0484						181.8959
Total	**0.1074**	**0.0962**	**0.9501**	**1.8300e-003**	**0.1780**	**1.2800e-003**	**0.1792**	**0.0472**	**1.1900e-003**	**0.0484**						**181.8959**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269						6,393.4879
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**8.6733**	**3.0727**	**11.7460**	**3.5965**	**2.8269**	**6.4234**						**6,393.4879**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1193	0.1069	1.0556	2.0300e-003	0.1977	1.4200e-003	0.1992	0.0524	1.3200e-003	0.0538						202.1066
Total	**0.1193**	**0.1069**	**1.0556**	**2.0300e-003**	**0.1977**	**1.4200e-003**	**0.1992**	**0.0524**	**1.3200e-003**	**0.0538**						**202.1066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,393.4878
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,393.4878**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1193	0.1069	1.0556	2.0300e-003	0.1977	1.4200e-003	0.1992	0.0524	1.3200e-003	0.0538						202.1066
Total	**0.1193**	**0.1069**	**1.0556**	**2.0300e-003**	**0.1977**	**1.4200e-003**	**0.1992**	**0.0524**	**1.3200e-003**	**0.0538**						**202.1066**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791						2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**						**2,667.3078**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370						301.6481
Worker	0.2088	0.1871	1.8473	3.5600e-003	0.3460	2.4900e-003	0.3485	0.0918	2.3100e-003	0.0941						353.6865
Total	**0.2934**	**1.9419**	**2.4450**	**6.4000e-003**	**0.4110**	**0.0216**	**0.4325**	**0.1105**	**0.0206**	**0.1310**						**655.3345**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,667.3078
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,667.3078**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370						301.6481
Worker	0.2088	0.1871	1.8473	3.5600e-003	0.3460	2.4900e-003	0.3485	0.0918	2.3100e-003	0.0941						353.6865
Total	**0.2934**	**1.9419**	**2.4450**	**6.4000e-003**	**0.4110**	**0.0216**	**0.4325**	**0.1105**	**0.0206**	**0.1310**						**655.3345**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1984					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						282.1909
Total	**2.5307**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						**282.1909**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0418	0.0374	0.3695	7.1000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188						70.7373
Total	**0.0418**	**0.0374**	**0.3695**	**7.1000e-004**	**0.0692**	**5.0000e-004**	**0.0697**	**0.0184**	**4.6000e-004**	**0.0188**						**70.7373**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1984					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						282.1909
Total	**2.2578**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**282.1909**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0418	0.0374	0.3695	7.1000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188						70.7373
Total	**0.0418**	**0.0374**	**0.3695**	**7.1000e-004**	**0.0692**	**5.0000e-004**	**0.0697**	**0.0184**	**4.6000e-004**	**0.0188**						**70.7373**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018
Other Non-Asphalt Surfaces	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
NaturalGas Unmitigated	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	688.19	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**7.4200e-003**	**0.0675**	**0.0567**	**4.0000e-004**		**5.1300e-003**	**5.1300e-003**		**5.1300e-003**	**5.1300e-003**						**81.4446**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.68819	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**7.4200e-003**	**0.0675**	**0.0567**	**4.0000e-004**		**5.1300e-003**	**5.1300e-003**		**5.1300e-003**	**5.1300e-003**						**81.4446**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2499	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Unmitigated	0.2739	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0446					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2292					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Total	**0.2739**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.6200e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0205					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2292					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Total	**0.2499**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.6200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase II

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	10.00	1000sqft	0.23	10,000.00	0
General Light Industry	54.51	1000sqft	9.05	54,508.00	0
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
Other Asphalt Surfaces	0.85	Acre	0.85	37,026.00	0
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase II - San Luis Obispo County, Summer

Project Characteristics - Phase II only.

Land Use - 54508 sf pavilion, 3000sf barn, 10000 animal care facility, 2.8 acres non-asphalt surfaces, 0.85 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 185 days, coating 45 days. Construction adjusted to reflect overall construction period of 12 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	300.00	185.00
tblLandUse	BuildingSpaceSquareFeet	54,510.00	54,508.00
tblLandUse	LandUseSquareFeet	54,510.00	54,508.00
tblLandUse	LotAcreage	1.25	9.05
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5356	50.2689	32.6682	0.0639	18.2442	2.1986	20.4428	9.9779	2.0227	12.0006						6,239.3538
2021	8.7218	21.2294	20.5703	0.0428	1.1011	0.9742	2.0753	0.2960	0.9160	1.2119						4,199.5240
Maximum	**8.7218**	**50.2689**	**32.6682**	**0.0639**	**18.2442**	**2.1986**	**20.4428**	**9.9779**	**2.0227**	**12.0006**						**6,239.3538**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5356	50.2689	32.6682	0.0639	7.2238	2.1986	9.4223	3.9202	2.0227	5.9428						6,239.3538
2021	8.7218	21.2294	20.5703	0.0428	1.1011	0.9742	2.0753	0.2960	0.9160	1.2119						4,199.5239
Maximum	**8.7218**	**50.2689**	**32.6682**	**0.0639**	**7.2238**	**2.1986**	**9.4223**	**3.9202**	**2.0227**	**5.9428**						**6,239.3538**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**56.97**	**0.00**	**48.94**	**58.96**	**0.00**	**45.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7770	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Energy	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
Mobile	1.3236	5.2770	14.5877	0.0446	4.0794	0.0441	4.1235	1.0898	0.0414	1.1312						4,502.3163
Total	**3.1485**	**5.7117**	**14.9601**	**0.0472**	**4.0794**	**0.0772**	**4.1566**	**1.0898**	**0.0745**	**1.1643**						**5,027.0578**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6056	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Energy	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
Mobile	1.3236	5.2770	14.5877	0.0446	4.0794	0.0441	4.1235	1.0898	0.0414	1.1312						4,502.3163
Total	**2.9770**	**5.7117**	**14.9601**	**0.0472**	**4.0794**	**0.0772**	**4.1566**	**1.0898**	**0.0745**	**1.1643**						**5,027.0578**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	8/9/2021	5	185	
5	Architectural Coating	Architectural Coating	8/10/2021	10/11/2021	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,262; Non-Residential Outdoor: 33,754; Striped Parking Area: 9,540 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	94.00	37.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4634	0.0000	0.4634	0.0702	0.0000	0.0702						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4634**	**1.6587**	**2.1221**	**0.0702**	**1.5419**	**1.6120**						**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.6467	0.1394	1.6200e-003	0.0358	2.8500e-003	0.0386	9.8000e-003	2.7200e-003	0.0125						175.1495
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0818**	**0.7003**	**0.6718**	**3.0100e-003**	**0.1841**	**3.8000e-003**	**0.1879**	**0.0491**	**3.6000e-003**	**0.0527**						**313.8455**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1807	0.0000	0.1807	0.0274	0.0000	0.0274						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.1807**	**1.6587**	**1.8394**	**0.0274**	**1.5419**	**1.5692**						**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.6467	0.1394	1.6200e-003	0.0358	2.8500e-003	0.0386	9.8000e-003	2.7200e-003	0.0125						175.1495
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0818**	**0.7003**	**0.6718**	**3.0100e-003**	**0.1841**	**3.8000e-003**	**0.1879**	**0.0491**	**3.6000e-003**	**0.0527**						**313.8455**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**						**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.3826**	**2.1739**	**5.5565**	**1.4026**	**2.0000**	**3.4026**						**6,054.4257**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1342	3.8185	1.0943	7.4700e-003	0.1718	0.0207	0.1925	0.0495	0.0198	0.0693						795.9087
Worker	0.4021	0.3354	3.3367	8.7200e-003	0.9293	5.9400e-003	0.9352	0.2465	5.4800e-003	0.2520						869.1618
Total	**0.5362**	**4.1539**	**4.4310**	**0.0162**	**1.1011**	**0.0267**	**1.1277**	**0.2959**	**0.0253**	**0.3213**						**1,665.0704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1342	3.8185	1.0943	7.4700e-003	0.1718	0.0207	0.1925	0.0495	0.0198	0.0693						795.9087
Worker	0.4021	0.3354	3.3367	8.7200e-003	0.9293	5.9400e-003	0.9352	0.2465	5.4800e-003	0.2520						869.1618
Total	**0.5362**	**4.1539**	**4.4310**	**0.0162**	**1.1011**	**0.0267**	**1.1277**	**0.2959**	**0.0253**	**0.3213**						**1,665.0704**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1097	3.4973	0.9650	7.4200e-003	0.1718	9.8100e-003	0.1816	0.0495	9.3800e-003	0.0589						791.2718
Worker	0.3745	0.3000	3.0301	8.4200e-003	0.9293	5.7500e-003	0.9351	0.2465	5.3100e-003	0.2518						839.4879
Total	**0.4841**	**3.7973**	**3.9951**	**0.0158**	**1.1011**	**0.0156**	**1.1166**	**0.2960**	**0.0147**	**0.3106**						**1,630.7597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1097	3.4973	0.9650	7.4200e-003	0.1718	9.8100e-003	0.1816	0.0495	9.3800e-003	0.0589						791.2718
Worker	0.3745	0.3000	3.0301	8.4200e-003	0.9293	5.7500e-003	0.9351	0.2465	5.3100e-003	0.2518						839.4879
Total	**0.4841**	**3.7973**	**3.9951**	**0.0158**	**1.1011**	**0.0156**	**1.1166**	**0.2960**	**0.0147**	**0.3106**						**1,630.7597**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.4273					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941						281.9309
Total	**8.6462**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0757	0.0606	0.6125	1.7000e-003	0.1878	1.1600e-003	0.1890	0.0498	1.0700e-003	0.0509						169.6837
Total	**0.0757**	**0.0606**	**0.6125**	**1.7000e-003**	**0.1878**	**1.1600e-003**	**0.1890**	**0.0498**	**1.0700e-003**	**0.0509**						**169.6837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.4273					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941						281.9309
Total	**8.6462**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0757	0.0606	0.6125	1.7000e-003	0.1878	1.1600e-003	0.1890	0.0498	1.0700e-003	0.0509						169.6837
Total	**0.0757**	**0.0606**	**0.6125**	**1.7000e-003**	**0.1878**	**1.1600e-003**	**0.1890**	**0.0498**	**1.0700e-003**	**0.0509**						**169.6837**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3236	5.2770	14.5877	0.0446	4.0794	0.0441	4.1235	1.0898	0.0414	1.1312						4,502.3163
Unmitigated	1.3236	5.2770	14.5877	0.0446	4.0794	0.0441	4.1235	1.0898	0.0414	1.1312						4,502.3163

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	379.93	71.95	37.07	947,056	947,056
Medical Office Building	361.30	89.60	15.50	495,366	495,366
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	16,634	16,634
Total	746.27	166.59	57.61	1,459,056	1,459,056

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Medical Office Building	13.00	5.00	5.00	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	13.00	5.00	5.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
General Light Industry	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Unrefrigerated Warehouse-No Rail	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Non-Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
NaturalGas Unmitigated	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3954.44	0.0427	0.3877	0.3257	2.3300e-003		0.0295	0.0295		0.0295	0.0295						467.9933
Medical Office Building	450.685	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003						53.3368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	28.6849	3.1000e-004	2.8100e-003	2.3600e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004						3.3948
Total		**0.0478**	**0.4347**	**0.3651**	**2.6200e-003**		**0.0330**	**0.0330**		**0.0330**	**0.0330**						**524.7249**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3.95444	0.0427	0.3877	0.3257	2.3300e-003		0.0295	0.0295		0.0295	0.0295						467.9933
Medical Office Building	0.450685	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003						53.3368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	0.0286849	3.1000e-004	2.8100e-003	2.3600e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004						3.3948
Total		**0.0478**	**0.4347**	**0.3651**	**2.6200e-003**		**0.0330**	**0.0330**		**0.0330**	**0.0330**						**524.7249**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6056	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Unmitigated	1.7770	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2754					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5010					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	6.8000e-004	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Total	**1.7770**	**7.0000e-005**	**7.2800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0166**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1039					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5010					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	6.8000e-004	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Total	**1.6056**	**7.0000e-005**	**7.2800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0166**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase III

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	88.15	1000sqft	7.00	88,150.00	0
Other Non-Asphalt Surfaces	3.70	Acre	3.70	161,172.00	0
Other Asphalt Surfaces	0.33	Acre	0.33	14,374.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Summer

Project Characteristics - Phase III only.

Land Use - 88150 sf event center, 2.8 acres non-asphalt surfaces, 0.33 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 420 days, coating 60 days. Construction adjusted to reflect overall construction period of 24 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less. Parking coating based on model default.

Vehicle Trips - Trip gen 13.613. Operational trips only projected to occur 30 days/year. Refer to separate spreadsheet for adjusted calculation of annual mobile-source emissions.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	300.00	420.00
tblConstructionPhase	PhaseEndDate	10/11/2021	9/26/2022
tblConstructionPhase	PhaseEndDate	8/9/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	8/10/2021	7/5/2022
tblLandUse	LotAcreage	2.02	7.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025

tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	13.61

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5356	50.2689	32.6682	0.0639	18.2442	2.1986	20.4428	9.9779	2.0227	12.0006						6,239.3538
2021	2.4705	21.8507	21.2748	0.0455	1.2970	0.9768	2.2738	0.3485	0.9185	1.2670						4,479.6606
2022	8.3169	19.7993	20.6810	0.0451	1.2970	0.8256	2.1227	0.3486	0.7768	1.1254						4,438.9456
Maximum	**8.3169**	**50.2689**	**32.6682**	**0.0639**	**18.2442**	**2.1986**	**20.4428**	**9.9779**	**2.0227**	**12.0006**						**6,239.3538**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	1.6086	30.0496	37.4325	0.0639	7.2238	1.3007	8.1711	3.9202	1.3006	4.8674						6,239.3538
2021	1.2435	18.6447	22.5733	0.0455	1.2970	0.9218	2.2188	0.3485	0.9207	1.2693						4,479.6606
2022	8.1717	18.4098	22.1914	0.0451	1.2970	0.9202	2.2172	0.3486	0.9192	1.2678						4,438.9456
Maximum	**8.1717**	**30.0496**	**37.4325**	**0.0639**	**7.2238**	**1.3007**	**8.1711**	**3.9202**	**1.3006**	**4.8674**						**6,239.3538**

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**28.06**	**27.00**	**-10.15**	**0.00**	**52.89**	**21.45**	**49.25**	**56.75**	**15.53**	**48.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3053	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Energy	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Mobile	2.1289	8.3962	26.1841	0.0872	8.3852	0.0760	8.4612	2.2395	0.0711	2.3106						8,812.8702
Total	**4.5033**	**9.0233**	**26.7201**	**0.0910**	**8.3852**	**0.1237**	**8.5089**	**2.2395**	**0.1188**	**2.3583**						**9,569.7275**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0815	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Energy	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Mobile	2.1289	8.3962	26.1841	0.0872	8.3852	0.0760	8.4612	2.2395	0.0711	2.3106						8,812.8702
Total	**4.2794**	**9.0233**	**26.7201**	**0.0910**	**8.3852**	**0.1237**	**8.5089**	**2.2395**	**0.1188**	**2.3583**						**9,569.7275**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	7/4/2022	5	420	
5	Architectural Coating	Architectural Coating	7/5/2022	9/26/2022	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 132,225; Non-Residential Outdoor: 44,075; Striped Parking Area: 10,533 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Scrapers	2	8.00	367	0.48
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	22.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	111.00	43.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	31.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3420	0.0000	0.3420	0.0518	0.0000	0.0518						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.3420**	**1.6587**	**2.0007**	**0.0518**	**1.5419**	**1.5936**						**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0133	0.4890	0.1054	1.2300e-003	0.0271	2.1500e-003	0.0292	7.4100e-003	2.0600e-003	9.4700e-003						132.4301
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0775**	**0.5425**	**0.6378**	**2.6200e-003**	**0.1753**	**3.1000e-003**	**0.1784**	**0.0467**	**2.9400e-003**	**0.0497**						**271.1261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1334	0.0000	0.1334	0.0202	0.0000	0.0202						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1334**	**0.8627**	**0.9961**	**0.0202**	**0.8627**	**0.8829**						**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0133	0.4890	0.1054	1.2300e-003	0.0271	2.1500e-003	0.0292	7.4100e-003	2.0600e-003	9.4700e-003						132.4301
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0775**	**0.5425**	**0.6378**	**2.6200e-003**	**0.1753**	**3.1000e-003**	**0.1784**	**0.0467**	**2.9400e-003**	**0.0497**						**271.1261**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,054.4257**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1559	4.4378	1.2717	8.6800e-003	0.1996	0.0241	0.2237	0.0575	0.0231	0.0805						924.9749
Worker	0.4748	0.3960	3.9401	0.0103	1.0974	7.0200e-003	1.1044	0.2910	6.4800e-003	0.2975						1,026.3506
Total	**0.6307**	**4.8338**	**5.2119**	**0.0190**	**1.2970**	**0.0311**	**1.3281**	**0.3485**	**0.0295**	**0.3781**						**1,951.3255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1559	4.4378	1.2717	8.6800e-003	0.1996	0.0241	0.2237	0.0575	0.0231	0.0805						924.9749
Worker	0.4748	0.3960	3.9401	0.0103	1.0974	7.0200e-003	1.1044	0.2910	6.4800e-003	0.2975						1,026.3506
Total	**0.6307**	**4.8338**	**5.2119**	**0.0190**	**1.2970**	**0.0311**	**1.3281**	**0.3485**	**0.0295**	**0.3781**						**1,951.3255**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1274	4.0644	1.1215	8.6200e-003	0.1996	0.0114	0.2110	0.0575	0.0109	0.0684						919.5861
Worker	0.4422	0.3542	3.5781	9.9400e-003	1.0974	6.8000e-003	1.1042	0.2910	6.2700e-003	0.2973						991.3102
Total	**0.5696**	**4.4186**	**4.6996**	**0.0186**	**1.2970**	**0.0182**	**1.3152**	**0.3485**	**0.0172**	**0.3657**						**1,910.8963**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1274	4.0644	1.1215	8.6200e-003	0.1996	0.0114	0.2110	0.0575	0.0109	0.0684						919.5861
Worker	0.4422	0.3542	3.5781	9.9400e-003	1.0974	6.8000e-003	1.1042	0.2910	6.2700e-003	0.2973						991.3102
Total	**0.5696**	**4.4186**	**4.6996**	**0.0186**	**1.2970**	**0.0182**	**1.3152**	**0.3485**	**0.0172**	**0.3657**						**1,910.8963**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1178	3.8652	1.0343	8.5500e-003	0.1997	0.0100	0.2097	0.0575	9.5800e-003	0.0671						913.4985
Worker	0.4148	0.3185	3.2833	9.5900e-003	1.0974	6.6000e-003	1.1040	0.2910	6.0900e-003	0.2971						955.8150
Total	**0.5326**	**4.1837**	**4.3176**	**0.0181**	**1.2970**	**0.0166**	**1.3137**	**0.3486**	**0.0157**	**0.3642**						**1,869.3134**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1178	3.8652	1.0343	8.5500e-003	0.1997	0.0100	0.2097	0.0575	9.5800e-003	0.0671						913.4985
Worker	0.4148	0.3185	3.2833	9.5900e-003	1.0974	6.6000e-003	1.1040	0.2910	6.0900e-003	0.2971						955.8150
Total	**0.5326**	**4.1837**	**4.3176**	**0.0181**	**1.2970**	**0.0166**	**1.3137**	**0.3486**	**0.0157**	**0.3642**						**1,869.3134**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0301					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**8.2346**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0822	0.0631	0.6508	1.9000e-003	0.2175	1.3100e-003	0.2188	0.0577	1.2100e-003	0.0589						189.4408
Total	**0.0822**	**0.0631**	**0.6508**	**1.9000e-003**	**0.2175**	**1.3100e-003**	**0.2188**	**0.0577**	**1.2100e-003**	**0.0589**						**189.4408**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0301					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**8.0895**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0822	0.0631	0.6508	1.9000e-003	0.2175	1.3100e-003	0.2188	0.0577	1.2100e-003	0.0589						189.4408
Total	**0.0822**	**0.0631**	**0.6508**	**1.9000e-003**	**0.2175**	**1.3100e-003**	**0.2188**	**0.0577**	**1.2100e-003**	**0.0589**						**189.4408**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1289	8.3962	26.1841	0.0872	8.3852	0.0760	8.4612	2.2395	0.0711	2.3106						8,812.8702
Unmitigated	2.1289	8.3962	26.1841	0.0872	8.3852	0.0760	8.4612	2.2395	0.0711	2.3106						8,812.8702

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,199.99	0.00	0.00	2,828,840	2,828,840
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,199.99	0.00	0.00	2,828,840	2,828,840

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Non-Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
NaturalGas Unmitigated	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	6395.1	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0690**	**0.6270**	**0.5267**	**3.7600e-003**		**0.0477**	**0.0477**		**0.0477**	**0.0477**						**756.8358**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	6.3951	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0690**	**0.6270**	**0.5267**	**3.7600e-003**		**0.0477**	**0.0477**		**0.0477**	**0.0477**						**756.8358**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0815	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Unmitigated	2.3053	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3559					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9486					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Total	**2.3053**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0215**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1320					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9486					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Total	**2.0815**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0215**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase IV

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	60.00	1000sqft	1.38	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Summer

Project Characteristics - Phase IV only.

Land Use - 60000 sf greenhouse,

Construction Phase - Based on model defaults. site prep 2 days, grading 4 days, construction 550 days. Arch coating for greenhouse considered minimal.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating -

Vehicle Trips - No increase in mobile trips

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	550.00
tblConstructionPhase	PhaseEndDate	3/2/2020	8/31/2020
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.7753	20.7842	15.3997	0.0265	5.8787	1.0707	6.8315	2.9747	1.0337	3.8513						2,502.6997
2019	2.4353	17.2107	14.8278	0.0265	0.2936	0.9265	1.2201	0.0789	0.8947	0.9736						2,481.6128
2020	2.1737	15.9095	14.3713	0.0264	0.2936	0.8031	1.0967	0.0789	0.7757	0.8546						2,456.7172
Maximum	**2.7753**	**20.7842**	**15.3997**	**0.0265**	**5.8787**	**1.0707**	**6.8315**	**2.9747**	**1.0337**	**3.8513**						**2,502.6997**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.8241	13.3791	15.0016	0.0265	2.3409	0.7442	2.7162	1.1729	0.7436	1.5481						2,502.6997
2019	0.8039	13.3072	14.8193	0.0265	0.2936	0.7422	1.0357	0.0789	0.7416	0.8206						2,481.6128
2020	0.7839	13.1979	14.6617	0.0264	0.2936	0.7387	1.0323	0.0789	0.7383	0.8172						2,456.7172
Maximum	**0.8241**	**13.3791**	**15.0016**	**0.0265**	**2.3409**	**0.7442**	**2.7162**	**1.1729**	**0.7436**	**1.5481**						**2,502.6997**

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**67.34**	**26.01**	**0.26**	**0.00**	**54.71**	**20.54**	**47.70**	**57.52**	**17.77**	**43.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5132	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Energy	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**1.5601**	**0.4268**	**0.3646**	**2.5600e-003**	**0.0000**	**0.0325**	**0.0325**	**0.0000**	**0.0325**	**0.0325**						**515.1603**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3608	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Energy	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**1.4077**	**0.4268**	**0.3646**	**2.5600e-003**	**0.0000**	**0.0325**	**0.0325**	**0.0000**	**0.0325**	**0.0325**						**515.1603**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/29/2018	6/11/2018	5	2	
2	Grading	Grading	6/12/2018	7/23/2018	5	4	
3	Building Construction	Building Construction	7/24/2018	8/31/2020	5	550	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537						0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761						1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**						**1,748.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0419	0.0370	0.3653	7.9000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						78.6518
Total	**0.0419**	**0.0370**	**0.3653**	**7.9000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**78.6518**

3.2 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519						0.0000
Off-Road	0.4212	8.4089	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747						1,748.8690
Total	**0.4212**	**8.4089**	**9.8221**	**0.0172**	**2.2618**	**0.3747**	**2.6365**	**1.1519**	**0.3747**	**1.5267**						**1,748.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0419	0.0370	0.3653	7.9000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						78.6518
Total	**0.0419**	**0.0370**	**0.3653**	**7.9000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**78.6518**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256						0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311						1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**						**1,432.3219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0419	0.0370	0.3653	7.9000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						78.6518
Total	**0.0419**	**0.0370**	**0.3653**	**7.9000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**78.6518**

3.3 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9166	0.0000	1.9166	0.9850	0.0000	0.9850						0.0000
Off-Road	0.3450	6.9025	8.0841	0.0141		0.3106	0.3106		0.3106	0.3106						1,432.3219
Total	**0.3450**	**6.9025**	**8.0841**	**0.0141**	**1.9166**	**0.3106**	**2.2272**	**0.9850**	**0.3106**	**1.2956**						**1,432.3219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0419	0.0370	0.3653	7.9000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						78.6518
Total	**0.0419**	**0.0370**	**0.3653**	**7.9000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**78.6518**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216						2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**						**2,041.0596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0526	1.1867	0.3815	2.0300e-003	0.0464	0.0110	0.0574	0.0134	0.0105	0.0239						215.8532
Worker	0.1308	0.1157	1.1415	2.4700e-003	0.2472	1.6900e-003	0.2488	0.0656	1.5600e-003	0.0671						245.7869
Total	**0.1834**	**1.3024**	**1.5231**	**4.5000e-003**	**0.2936**	**0.0127**	**0.3063**	**0.0789**	**0.0121**	**0.0910**						**461.6401**

3.4 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,041.0596
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,041.0596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0526	1.1867	0.3815	2.0300e-003	0.0464	0.0110	0.0574	0.0134	0.0105	0.0239						215.8532
Worker	0.1308	0.1157	1.1415	2.4700e-003	0.2472	1.6900e-003	0.2488	0.0656	1.5600e-003	0.0671						245.7869
Total	**0.1834**	**1.3024**	**1.5231**	**4.5000e-003**	**0.2936**	**0.0127**	**0.3063**	**0.0789**	**0.0121**	**0.0910**						**461.6401**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846						2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**						**2,027.7210**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0458	1.1292	0.3361	2.0200e-003	0.0464	9.0200e-003	0.0554	0.0134	8.6300e-003	0.0220						215.3358
Worker	0.1174	0.1013	1.0046	2.4000e-003	0.2472	1.6300e-003	0.2488	0.0656	1.5100e-003	0.0671						238.5560
Total	**0.1632**	**1.2305**	**1.3407**	**4.4200e-003**	**0.2936**	**0.0107**	**0.3042**	**0.0789**	**0.0101**	**0.0891**						**453.8918**

3.4 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,027.7210
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,027.7210**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0458	1.1292	0.3361	2.0200e-003	0.0464	9.0200e-003	0.0554	0.0134	8.6300e-003	0.0220						215.3358
Worker	0.1174	0.1013	1.0046	2.4000e-003	0.2472	1.6300e-003	0.2488	0.0656	1.5100e-003	0.0671						238.5560
Total	**0.1632**	**1.2305**	**1.3407**	**4.4200e-003**	**0.2936**	**0.0107**	**0.3042**	**0.0789**	**0.0101**	**0.0891**						**453.8918**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688						2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**						**2,010.4467**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0363	1.0320	0.2958	2.0200e-003	0.0464	5.6000e-003	0.0520	0.0134	5.3600e-003	0.0187						215.1104
Worker	0.1069	0.0892	0.8874	2.3200e-003	0.2472	1.5800e-003	0.2487	0.0656	1.4600e-003	0.0670						231.1600
Total	**0.1432**	**1.1212**	**1.1832**	**4.3400e-003**	**0.2936**	**7.1800e-003**	**0.3008**	**0.0789**	**6.8200e-003**	**0.0857**						**446.2705**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,010.4467
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,010.4467**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0363	1.0320	0.2958	2.0200e-003	0.0464	5.6000e-003	0.0520	0.0134	5.3600e-003	0.0187						215.1104
Worker	0.1069	0.0892	0.8874	2.3200e-003	0.2472	1.5800e-003	0.2487	0.0656	1.4600e-003	0.0670						231.1600
Total	**0.1432**	**1.1212**	**1.1832**	**4.3400e-003**	**0.2936**	**7.1800e-003**	**0.3008**	**0.0789**	**6.8200e-003**	**0.0857**						**446.2705**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
NaturalGas Unmitigated	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4352.88	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Total		**0.0469**	**0.4268**	**0.3585**	**2.5600e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**						**515.1463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.35288	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Total		**0.0469**	**0.4268**	**0.3585**	**2.5600e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**						**515.1463**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3608	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Unmitigated	1.5132	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2286					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.7000e-004	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Total	**1.5132**	**6.0000e-005**	**6.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						**0.0140**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0762					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.7000e-004	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Total	**1.3608**	**6.0000e-005**	**6.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						**0.0140**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase I

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.49	1000sqft	23.30	9,486.00	0
Other Non-Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	546.6	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Winter

Project Characteristics - Phase I only.

Land Use - 9.486sf of building area, 1.7 acres other/non-asphalt surfaces

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 35 days, construction 90 days, coating 20 days. Construction adjusted to reflect overall construction period of 8 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	4,443.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	90.00
tblLandUse	BuildingSpaceSquareFeet	9,490.00	9,486.00
tblLandUse	LandUseSquareFeet	9,490.00	9,486.00
tblLandUse	LotAcreage	0.22	23.30
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	546.6

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Winter

tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
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tblVehicleEF	LDT2	5.1140e-003	0.02
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tblVehicleEF	LDT2	1.15	3.52
tblVehicleEF	LDT2	282.44	406.52
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.10	0.38
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.07	0.13

tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	2.8300e-003	4.0840e-003
tblVehicleEF	LDT2	6.7500e-004	9.7800e-004
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	4.3310e-003	0.01
tblVehicleEF	LDT2	6.1920e-003	0.03
tblVehicleEF	LDT2	0.59	1.48
tblVehicleEF	LDT2	1.47	4.58
tblVehicleEF	LDT2	269.14	387.45
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.11	0.44
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003
tblVehicleEF	LDT2	0.03	0.06

tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	2.6960e-003	3.8920e-003
tblVehicleEF	LDT2	6.8000e-004	9.9600e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.93	1.79
tblVehicleEF	LHD1	1.87	3.06
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.63	3.11
tblVehicleEF	LHD1	0.78	0.95
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9300e-004	3.3000e-004
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.20	0.33
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02

tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.94	1.82
tblVehicleEF	LHD1	1.75	2.86
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.57	3.00
tblVehicleEF	LHD1	0.74	0.89
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.18	0.29
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003

tblVehicleEF	LHD1	2.9100e-004	3.2600e-004
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.16	0.25
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.19	0.32
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.92	1.78
tblVehicleEF	LHD1	1.93	3.16
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.62	3.08
tblVehicleEF	LHD1	0.81	0.98
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003

tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8650e-003
tblVehicleEF	LHD1	2.9400e-004	3.3200e-004
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.21	0.34
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0770e-003	0.01
tblVehicleEF	LHD2	3.6530e-003	9.9930e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.82	1.29
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14

tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.60	2.72
tblVehicleEF	LHD2	0.28	0.49
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004

tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.1140e-003	0.01
tblVehicleEF	LHD2	3.5240e-003	9.5060e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.03
tblVehicleEF	LHD2	0.77	1.21
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.58	2.63
tblVehicleEF	LHD2	0.27	0.46
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
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tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0570e-003	0.01
tblVehicleEF	LHD2	3.7240e-003	0.01
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.84	1.33
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.59	2.70
tblVehicleEF	LHD2	0.28	0.50

tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	MCY	0.43	0.39
tblVehicleEF	MCY	0.16	0.18

tblVehicleEF	MCY	18.71	23.95
tblVehicleEF	MCY	10.37	10.07
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.17	1.23
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.14	2.47
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.25	2.47
tblVehicleEF	MCY	2.0370e-003	2.0600e-003
tblVehicleEF	MCY	6.9300e-004	7.4100e-004
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.66	2.94
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.44	2.68
tblVehicleEF	MCY	0.42	0.37
tblVehicleEF	MCY	0.14	0.15

tblVehicleEF	MCY	17.66	22.30
tblVehicleEF	MCY	9.19	9.05
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.06	1.11
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.07	2.34
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	1.93	2.09
tblVehicleEF	MCY	2.0180e-003	2.0290e-003
tblVehicleEF	MCY	6.6500e-004	7.1300e-004
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.57	2.79
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	2.10	2.27
tblVehicleEF	MCY	0.44	0.40
tblVehicleEF	MCY	0.18	0.19

tblVehicleEF	MCY	19.44	25.08
tblVehicleEF	MCY	10.99	10.63
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.18	1.24
tblVehicleEF	MCY	0.33	0.34
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.18	2.55
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.41	2.66
tblVehicleEF	MCY	2.0500e-003	2.0800e-003
tblVehicleEF	MCY	7.0800e-004	7.5600e-004
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.71	3.03
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.62	2.89
tblVehicleEF	MDV	7.1160e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.79	2.10
tblVehicleEF	MDV	2.28	5.67
tblVehicleEF	MDV	365.97	513.88
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.21	0.60
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.16	0.47
tblVehicleEF	MDV	3.6620e-003	5.1620e-003
tblVehicleEF	MDV	9.1900e-004	1.2860e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.18	0.52
tblVehicleEF	MDV	7.5450e-003	0.02
tblVehicleEF	MDV	0.01	0.03

tblVehicleEF	MDV	0.85	2.21
tblVehicleEF	MDV	1.91	4.74
tblVehicleEF	MDV	380.55	534.42
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.10	0.29
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.14	0.41
tblVehicleEF	MDV	3.8090e-003	5.3690e-003
tblVehicleEF	MDV	9.1300e-004	1.2690e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.15	0.45
tblVehicleEF	MDV	6.9970e-003	0.02
tblVehicleEF	MDV	0.01	0.04

tblVehicleEF	MDV	0.78	2.09
tblVehicleEF	MDV	2.45	6.12
tblVehicleEF	MDV	363.07	509.79
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.22	0.63
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.17	0.50
tblVehicleEF	MDV	3.6330e-003	5.1210e-003
tblVehicleEF	MDV	9.2200e-004	1.2940e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04

tblVehicleEF	MH	0.87	6.14
tblVehicleEF	MH	4.40	9.22
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.77	1.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.58
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3900e-004	8.0700e-004
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.29	0.64

tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.89	6.17
tblVehicleEF	MH	4.08	8.53
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.34	2.26
tblVehicleEF	MH	0.73	1.02
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.07	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.25	0.55
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3300e-004	7.9500e-004
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.09	0.34

tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.28	0.60
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.86	6.15
tblVehicleEF	MH	4.54	9.55
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
tblVehicleEF	MH	1.39	2.38
tblVehicleEF	MH	0.80	1.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.60
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4100e-004	8.1300e-004
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14

tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.30	0.66
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9950e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.35	0.60
tblVehicleEF	MHD	0.27	1.36
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tblVehicleEF	MHD	11.30	10.90
tblVehicleEF	MHD	1.2800e-004	8.2220e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.2300e-004	7.8670e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	4.0300e-004	9.4500e-004

tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.73
tblVehicleEF	MHD	1.4160e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9900e-004	8.6500e-004
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.26	0.79
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	3.0230e-003	0.02
tblVehicleEF	MHD	0.03	0.09
tblVehicleEF	MHD	0.23	0.41
tblVehicleEF	MHD	0.27	1.37
tblVehicleEF	MHD	3.61	11.15
tblVehicleEF	MHD	156.26	151.37
tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.46	1.43
tblVehicleEF	MHD	1.22	4.18
tblVehicleEF	MHD	11.27	10.81
tblVehicleEF	MHD	1.0800e-004	6.9320e-003

tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.0300e-004	6.6320e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.23	0.69
tblVehicleEF	MHD	1.5010e-003	1.4560e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9400e-004	8.5100e-004
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.25	0.75
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9790e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.44	0.77
tblVehicleEF	MHD	0.27	1.35

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tblVehicleEF	MHD	0.43	1.32
tblVehicleEF	MHD	1.25	4.30
tblVehicleEF	MHD	11.32	10.95
tblVehicleEF	MHD	1.5600e-004	0.01
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tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.4900e-004	9.5720e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.75
tblVehicleEF	MHD	1.3040e-003	1.2660e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.0100e-004	8.7300e-004
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.03	0.07

tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.27	0.82
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7130e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.24	0.28
tblVehicleEF	OBUS	0.37	1.36
tblVehicleEF	OBUS	4.77	8.89
tblVehicleEF	OBUS	136.21	95.08
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.31	0.62
tblVehicleEF	OBUS	1.08	2.82
tblVehicleEF	OBUS	3.70	3.21
tblVehicleEF	OBUS	2.8000e-005	3.6900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.7000e-005	3.5300e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004

tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
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tblVehicleEF	OBUS	1.3110e-003	9.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	8.6600e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.33	0.61
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.7950e-003	0.02
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.23	0.26
tblVehicleEF	OBUS	0.38	1.39
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tblVehicleEF	OBUS	143.39	99.72
tblVehicleEF	OBUS	1,284.15	1,343.57
tblVehicleEF	OBUS	62.81	70.88
tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
tblVehicleEF	OBUS	0.32	0.64
tblVehicleEF	OBUS	1.04	2.71
tblVehicleEF	OBUS	3.65	3.12
tblVehicleEF	OBUS	2.4000e-005	3.1100e-004

tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.3000e-005	2.9800e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.28	0.53
tblVehicleEF	OBUS	1.3790e-003	9.6400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0600e-004	8.5500e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
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tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.31	0.58
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.6690e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.25	0.30
tblVehicleEF	OBUS	0.37	1.35

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tblVehicleEF	OBUS	1.07	2.80
tblVehicleEF	OBUS	3.72	3.25
tblVehicleEF	OBUS	3.4000e-005	4.4900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	3.3000e-005	4.3000e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.31	0.57
tblVehicleEF	OBUS	1.2160e-003	8.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1400e-004	8.7100e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.05

tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.33	0.63
tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.19
tblVehicleEF	SBUS	6.62	7.35
tblVehicleEF	SBUS	0.76	3.18
tblVehicleEF	SBUS	7.89	21.72
tblVehicleEF	SBUS	1,145.19	1,180.91
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.70	12.02
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tblVehicleEF	SBUS	13.61	14.11
tblVehicleEF	SBUS	2.9560e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.8280e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
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tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.9100e-004	8.7900e-004
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
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tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
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tblVehicleEF	SBUS	0.42	1.12
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tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.07	0.17
tblVehicleEF	SBUS	6.54	7.20
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tblVehicleEF	SBUS	6.36	17.53
tblVehicleEF	SBUS	1,199.90	1,236.25
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.88	12.40
tblVehicleEF	SBUS	2.15	5.99

tblVehicleEF	SBUS	13.58	14.02
tblVehicleEF	SBUS	2.4920e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.3840e-003	0.01
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.87
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.91
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6500e-004	8.1000e-004
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.99
tblVehicleEF	SBUS	0.81	0.83

tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.20
tblVehicleEF	SBUS	6.73	7.56
tblVehicleEF	SBUS	0.75	3.14
tblVehicleEF	SBUS	8.48	23.35
tblVehicleEF	SBUS	1,069.66	1,104.48
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.45	11.49
tblVehicleEF	SBUS	2.21	6.19
tblVehicleEF	SBUS	13.62	14.15
tblVehicleEF	SBUS	3.5960e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	3.4410e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	0.79	0.88
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	1.07

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.0100e-004	9.0600e-004
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	1.14	1.27
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	1.17
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	2.01	4.92
tblVehicleEF	UBUS	8.63	9.83
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.51	10.43
tblVehicleEF	UBUS	12.44	14.50
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06

tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.74
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5480e-003	1.3050e-003
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.20	0.85
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.81
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	2.02	4.97
tblVehicleEF	UBUS	7.31	8.16
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.38	10.08
tblVehicleEF	UBUS	12.37	14.43
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004

tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.70	0.66
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5240e-003	1.2760e-003
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.20	0.86
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.72
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.06
tblVehicleEF	UBUS	2.01	4.90
tblVehicleEF	UBUS	9.27	10.63
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.48	10.34
tblVehicleEF	UBUS	12.48	14.53
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25

tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.16	0.68
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.81	0.78
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5590e-003	1.3190e-003
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.20	0.84
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.89	0.85
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.8839	68.0609	39.8298	0.0640	18.2442	3.0741	21.1241	9.9779	2.8282	12.6273						6,586.1888
Maximum	**5.8839**	**68.0609**	**39.8298**	**0.0640**	**18.2442**	**3.0741**	**21.1241**	**9.9779**	**2.8282**	**12.6273**						**6,586.1888**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	2.3053	30.0995	37.7699	0.0640	7.2238	1.3009	8.1712	3.9202	1.3007	4.8675						6,586.1888
Maximum	**2.3053**	**30.0995**	**37.7699**	**0.0640**	**7.2238**	**1.3009**	**8.1712**	**3.9202**	**1.3007**	**4.8675**						**6,586.1888**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**60.82**	**55.78**	**5.17**	**0.00**	**60.41**	**57.68**	**61.32**	**60.71**	**54.01**	**61.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2739	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Energy	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.2814**	**0.0675**	**0.0578**	**4.0000e-004**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**0.0000**	**5.1300e-003**	**5.1300e-003**						**81.4473**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2499	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Energy	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.2573**	**0.0675**	**0.0578**	**4.0000e-004**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**0.0000**	**5.1300e-003**	**5.1300e-003**						**81.4473**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**8.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2017	5/26/2017	5	20	
2	Site Preparation	Site Preparation	5/27/2017	6/9/2017	5	10	
3	Grading	Grading	6/10/2017	7/28/2017	5	35	
4	Building Construction	Building Construction	7/29/2017	12/1/2017	5	90	
5	Architectural Coating	Architectural Coating	12/2/2017	12/29/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 1.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,229; Non-Residential Outdoor: 4,743; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CalPoly Oppenheimer - Phase I - San Luis Obispo County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Rubber Tired Dozers	3	8.00	247	0.40
	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	7.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4634	0.0000	0.4634	0.0702	0.0000	0.0702						0.0000
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425						3,951.1070
Total	**4.1031**	**42.7475**	**23.0122**	**0.0388**	**0.4634**	**2.1935**	**2.6569**	**0.0702**	**2.0425**	**2.1127**						**3,951.1070**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0296	0.8234	0.1998	1.6500e-003	0.0357	7.9800e-003	0.0437	9.7800e-003	7.6300e-003	0.0174						177.0542
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1017	0.0909	0.7854	1.4500e-003	0.1483	1.0700e-003	0.1494	0.0393	9.9000e-004	0.0403						144.5257
Total	**0.1313**	**0.9143**	**0.9852**	**3.1000e-003**	**0.1840**	**9.0500e-003**	**0.1931**	**0.0491**	**8.6200e-003**	**0.0577**						**321.5800**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1807	0.0000	0.1807	0.0274	0.0000	0.0274						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,951.1070
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1807**	**0.8627**	**1.0434**	**0.0274**	**0.8627**	**0.8901**						**3,951.1070**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0296	0.8234	0.1998	1.6500e-003	0.0357	7.9800e-003	0.0437	9.7800e-003	7.6300e-003	0.0174						177.0542
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1017	0.0909	0.7854	1.4500e-003	0.1483	1.0700e-003	0.1494	0.0393	9.9000e-004	0.0403						144.5257
Total	**0.1313**	**0.9143**	**0.9852**	**3.1000e-003**	**0.1840**	**9.0500e-003**	**0.1931**	**0.0491**	**8.6200e-003**	**0.0577**						**321.5800**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483						3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.0663**	**2.8786**	**20.9448**	**9.9307**	**2.6483**	**12.5790**						**3,924.7852**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1220	0.1091	0.9425	1.7400e-003	0.1780	1.2800e-003	0.1792	0.0472	1.1900e-003	0.0484						173.4309
Total	**0.1220**	**0.1091**	**0.9425**	**1.7400e-003**	**0.1780**	**1.2800e-003**	**0.1792**	**0.0472**	**1.1900e-003**	**0.0484**						**173.4309**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,924.7852
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,924.7852**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1220	0.1091	0.9425	1.7400e-003	0.1780	1.2800e-003	0.1792	0.0472	1.1900e-003	0.0484						173.4309
Total	**0.1220**	**0.1091**	**0.9425**	**1.7400e-003**	**0.1780**	**1.2800e-003**	**0.1792**	**0.0472**	**1.1900e-003**	**0.0484**						**173.4309**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	5.7483	67.9396	38.7826	0.0620		3.0727	3.0727		2.8269	2.8269						6,393.4879
Total	**5.7483**	**67.9396**	**38.7826**	**0.0620**	**8.6733**	**3.0727**	**11.7460**	**3.5965**	**2.8269**	**6.4234**						**6,393.4879**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1356	0.1213	1.0473	1.9400e-003	0.1977	1.4200e-003	0.1992	0.0524	1.3200e-003	0.0538						192.7010
Total	**0.1356**	**0.1213**	**1.0473**	**1.9400e-003**	**0.1977**	**1.4200e-003**	**0.1992**	**0.0524**	**1.3200e-003**	**0.0538**						**192.7010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,393.4878
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,393.4878**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1356	0.1213	1.0473	1.9400e-003	0.1977	1.4200e-003	0.1992	0.0524	1.3200e-003	0.0538						192.7010
Total	**0.1356**	**0.1213**	**1.0473**	**1.9400e-003**	**0.1977**	**1.4200e-003**	**0.1992**	**0.0524**	**1.3200e-003**	**0.0538**						**192.7010**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791						2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**						**2,667.3078**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374						293.4949
Worker	0.2373	0.2122	1.8327	3.3900e-003	0.3460	2.4900e-003	0.3485	0.0918	2.3100e-003	0.0941						337.2267
Total	**0.3262**	**1.9648**	**2.4999**	**6.1600e-003**	**0.4110**	**0.0220**	**0.4330**	**0.1105**	**0.0210**	**0.1315**						**630.7216**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,667.3078
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,667.3078**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374						293.4949
Worker	0.2373	0.2122	1.8327	3.3900e-003	0.3460	2.4900e-003	0.3485	0.0918	2.3100e-003	0.0941						337.2267
Total	**0.3262**	**1.9648**	**2.4999**	**6.1600e-003**	**0.4110**	**0.0220**	**0.4330**	**0.1105**	**0.0210**	**0.1315**						**630.7216**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1984					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						282.1909
Total	**2.5307**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						**282.1909**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0475	0.0424	0.3665	6.8000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188						67.4453
Total	**0.0475**	**0.0424**	**0.3665**	**6.8000e-004**	**0.0692**	**5.0000e-004**	**0.0697**	**0.0184**	**4.6000e-004**	**0.0188**						**67.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.1984					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						282.1909
Total	**2.2578**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**282.1909**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0475	0.0424	0.3665	6.8000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188						67.4453
Total	**0.0475**	**0.0424**	**0.3665**	**6.8000e-004**	**0.0692**	**5.0000e-004**	**0.0697**	**0.0184**	**4.6000e-004**	**0.0188**						**67.4453**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018
Other Non-Asphalt Surfaces	0.538734	0.036174	0.198999	0.136972	0.036255	0.008427	0.013246	0.018689	0.002427	0.001358	0.005860	0.000839	0.002018

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
NaturalGas Unmitigated	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	688.19	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**7.4200e-003**	**0.0675**	**0.0567**	**4.0000e-004**		**5.1300e-003**	**5.1300e-003**		**5.1300e-003**	**5.1300e-003**						**81.4446**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.68819	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003						81.4446
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**7.4200e-003**	**0.0675**	**0.0567**	**4.0000e-004**		**5.1300e-003**	**5.1300e-003**		**5.1300e-003**	**5.1300e-003**						**81.4446**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2499	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Unmitigated	0.2739	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0446					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2292					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Total	**0.2739**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.6200e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0205					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2292					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.6200e-003
Total	**0.2499**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.6200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase II

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	10.00	1000sqft	0.23	10,000.00	0
General Light Industry	54.51	1000sqft	9.05	54,508.00	0
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
Other Asphalt Surfaces	0.85	Acre	0.85	37,026.00	0
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase II only.

Land Use - 54508 sf pavilion, 3000sf barn, 10000 animal care facility, 2.8 acres non-asphalt surfaces, 0.85 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 185 days, coating 45 days. Construction adjusted to reflect overall construction period of 12 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	300.00	185.00
tblLandUse	BuildingSpaceSquareFeet	54,510.00	54,508.00
tblLandUse	LandUseSquareFeet	54,510.00	54,508.00
tblLandUse	LotAcreage	1.25	9.05
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5476	50.2785	32.6490	0.0638	18.2442	2.1986	20.4428	9.9779	2.0227	12.0006						6,230.6968
2021	8.7326	21.2469	20.6079	0.0421	1.1011	0.9748	2.0758	0.2960	0.9165	1.2125						4,136.0539
Maximum	**8.7326**	**50.2785**	**32.6490**	**0.0638**	**18.2442**	**2.1986**	**20.4428**	**9.9779**	**2.0227**	**12.0006**						**6,230.6968**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5476	50.2785	32.6490	0.0638	7.2238	2.1986	9.4223	3.9202	2.0227	5.9428						6,230.6968
2021	8.7326	21.2469	20.6079	0.0421	1.1011	0.9748	2.0758	0.2960	0.9165	1.2125						4,136.0539
Maximum	**8.7326**	**50.2785**	**32.6490**	**0.0638**	**7.2238**	**2.1986**	**9.4223**	**3.9202**	**2.0227**	**5.9428**						**6,230.6968**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**56.97**	**0.00**	**48.94**	**58.96**	**0.00**	**45.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7770	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Energy	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
Mobile	1.2808	5.4703	14.8472	0.0428	4.0794	0.0446	4.1240	1.0898	0.0418	1.1316						4,325.5974
Total	**3.1056**	**5.9051**	**15.2196**	**0.0454**	**4.0794**	**0.0776**	**4.1570**	**1.0898**	**0.0749**	**1.1647**						**4,850.3389**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6056	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Energy	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
Mobile	1.2808	5.4703	14.8472	0.0428	4.0794	0.0446	4.1240	1.0898	0.0418	1.1316						4,325.5974
Total	**2.9341**	**5.9051**	**15.2196**	**0.0454**	**4.0794**	**0.0776**	**4.1570**	**1.0898**	**0.0749**	**1.1647**						**4,850.3389**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.52**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	8/9/2021	5	185	
5	Architectural Coating	Architectural Coating	8/10/2021	10/11/2021	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,262; Non-Residential Outdoor: 33,754; Striped Parking Area: 9,540 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	94.00	37.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4634	0.0000	0.4634	0.0702	0.0000	0.0702						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.4634**	**1.6587**	**2.1221**	**0.0702**	**1.5419**	**1.6120**						**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0181	0.6512	0.1480	1.6000e-003	0.0358	2.9100e-003	0.0387	9.8000e-003	2.7800e-003	0.0126						172.5882
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0912**	**0.7120**	**0.6661**	**2.9300e-003**	**0.1841**	**3.8600e-003**	**0.1879**	**0.0491**	**3.6600e-003**	**0.0528**						**304.7915**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1807	0.0000	0.1807	0.0274	0.0000	0.0274						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.1807**	**1.6587**	**1.8394**	**0.0274**	**1.5419**	**1.5692**						**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0181	0.6512	0.1480	1.6000e-003	0.0358	2.9100e-003	0.0387	9.8000e-003	2.7800e-003	0.0126						172.5882
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0912**	**0.7120**	**0.6661**	**2.9300e-003**	**0.1841**	**3.8600e-003**	**0.1879**	**0.0491**	**3.6600e-003**	**0.0528**						**304.7915**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**						**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.3826**	**2.1739**	**5.5565**	**1.4026**	**2.0000**	**3.4026**						**6,054.4257**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1419	3.7996	1.2322	7.2500e-003	0.1718	0.0214	0.1931	0.0495	0.0205	0.0699						771.9710
Worker	0.4583	0.3807	3.2462	8.3200e-003	0.9293	5.9400e-003	0.9352	0.2465	5.4800e-003	0.2520						828.4739
Total	**0.6002**	**4.1802**	**4.4784**	**0.0156**	**1.1011**	**0.0273**	**1.1284**	**0.2959**	**0.0259**	**0.3219**						**1,600.4448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1419	3.7996	1.2322	7.2500e-003	0.1718	0.0214	0.1931	0.0495	0.0205	0.0699						771.9710
Worker	0.4583	0.3807	3.2462	8.3200e-003	0.9293	5.9400e-003	0.9352	0.2465	5.4800e-003	0.2520						828.4739
Total	**0.6002**	**4.1802**	**4.4784**	**0.0156**	**1.1011**	**0.0273**	**1.1284**	**0.2959**	**0.0259**	**0.3219**						**1,600.4448**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1168	3.4744	1.0927	7.1900e-003	0.1718	0.0104	0.1822	0.0495	9.9400e-003	0.0594						767.1051
Worker	0.4277	0.3404	2.9400	8.0300e-003	0.9293	5.7500e-003	0.9351	0.2465	5.3100e-003	0.2518						800.1846
Total	**0.5445**	**3.8148**	**4.0327**	**0.0152**	**1.1011**	**0.0161**	**1.1172**	**0.2960**	**0.0153**	**0.3112**						**1,567.2897**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1168	3.4744	1.0927	7.1900e-003	0.1718	0.0104	0.1822	0.0495	9.9400e-003	0.0594						767.1051
Worker	0.4277	0.3404	2.9400	8.0300e-003	0.9293	5.7500e-003	0.9351	0.2465	5.3100e-003	0.2518						800.1846
Total	**0.5445**	**3.8148**	**4.0327**	**0.0152**	**1.1011**	**0.0161**	**1.1172**	**0.2960**	**0.0153**	**0.3112**						**1,567.2897**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.4273					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941						281.9309
Total	**8.6462**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0865	0.0688	0.5943	1.6200e-003	0.1878	1.1600e-003	0.1890	0.0498	1.0700e-003	0.0509						161.7394
Total	**0.0865**	**0.0688**	**0.5943**	**1.6200e-003**	**0.1878**	**1.1600e-003**	**0.1890**	**0.0498**	**1.0700e-003**	**0.0509**						**161.7394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.4273					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941						281.9309
Total	**8.6462**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0865	0.0688	0.5943	1.6200e-003	0.1878	1.1600e-003	0.1890	0.0498	1.0700e-003	0.0509						161.7394
Total	**0.0865**	**0.0688**	**0.5943**	**1.6200e-003**	**0.1878**	**1.1600e-003**	**0.1890**	**0.0498**	**1.0700e-003**	**0.0509**						**161.7394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2808	5.4703	14.8472	0.0428	4.0794	0.0446	4.1240	1.0898	0.0418	1.1316						4,325.5974
Unmitigated	1.2808	5.4703	14.8472	0.0428	4.0794	0.0446	4.1240	1.0898	0.0418	1.1316						4,325.5974

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	379.93	71.95	37.07	947,056	947,056
Medical Office Building	361.30	89.60	15.50	495,366	495,366
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	16,634	16,634
Total	746.27	166.59	57.61	1,459,056	1,459,056

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Medical Office Building	13.00	5.00	5.00	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	13.00	5.00	5.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
General Light Industry	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Unrefrigerated Warehouse-No Rail	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Non-Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249
NaturalGas Unmitigated	0.0478	0.4347	0.3651	2.6100e-003		0.0330	0.0330		0.0330	0.0330						524.7249

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3954.44	0.0427	0.3877	0.3257	2.3300e-003		0.0295	0.0295		0.0295	0.0295						467.9933
Medical Office Building	450.685	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003						53.3368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	28.6849	3.1000e-004	2.8100e-003	2.3600e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004						3.3948
Total		**0.0478**	**0.4347**	**0.3651**	**2.6200e-003**		**0.0330**	**0.0330**		**0.0330**	**0.0330**						**524.7249**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3.95444	0.0427	0.3877	0.3257	2.3300e-003		0.0295	0.0295		0.0295	0.0295						467.9933
Medical Office Building	0.450685	4.8600e-003	0.0442	0.0371	2.7000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003						53.3368
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	0.0286849	3.1000e-004	2.8100e-003	2.3600e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004						3.3948
Total		**0.0478**	**0.4347**	**0.3651**	**2.6200e-003**		**0.0330**	**0.0330**		**0.0330**	**0.0330**						**524.7249**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6056	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Unmitigated	1.7770	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2754					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5010					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	6.8000e-004	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Total	**1.7770**	**7.0000e-005**	**7.2800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0166**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1039					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5010					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	6.8000e-004	7.0000e-005	7.2800e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0166
Total	**1.6056**	**7.0000e-005**	**7.2800e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0166**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase III

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	88.15	1000sqft	7.00	88,150.00	0
Other Non-Asphalt Surfaces	3.70	Acre	3.70	161,172.00	0
Other Asphalt Surfaces	0.33	Acre	0.33	14,374.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Winter

Project Characteristics - Phase III only.

Land Use - 88150 sf event center, 2.8 acres non-asphalt surfaces, 0.33 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 420 days, coating 60 days. Construction adjusted to reflect overall construction period of 24 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less. Parking coating based on model default.

Vehicle Trips - Trip gen 13.613. Operational trips only projected to occur 30 days/year. Refer to separate spreadsheet for adjusted calculation of annual mobile-source emissions.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	300.00	420.00
tblConstructionPhase	PhaseEndDate	10/11/2021	9/26/2022
tblConstructionPhase	PhaseEndDate	8/9/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	8/10/2021	7/5/2022
tblLandUse	LotAcreage	2.02	7.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025

tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2023
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	13.61

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5476	50.2785	32.6490	0.0638	18.2442	2.1986	20.4428	9.9779	2.0227	12.0006						6,230.6968
2021	2.5417	21.8718	21.3168	0.0448	1.2970	0.9775	2.2745	0.3485	0.9191	1.2676						4,405.1636
2022	8.3288	19.8140	20.7154	0.0444	1.2970	0.8263	2.1233	0.3486	0.7774	1.1260						4,365.8757
Maximum	**8.3288**	**50.2785**	**32.6490**	**0.0638**	**18.2442**	**2.1986**	**20.4428**	**9.9779**	**2.0227**	**12.0006**						**6,230.6968**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	1.6206	30.0592	37.4133	0.0638	7.2238	1.3007	8.1711	3.9202	1.3006	4.8674						6,230.6968
2021	1.3146	18.6658	22.6153	0.0448	1.2970	0.9224	2.2194	0.3485	0.9214	1.2699						4,405.1636
2022	8.1837	18.4245	22.2257	0.0444	1.2970	0.9208	2.2178	0.3486	0.9198	1.2684						4,365.8757
Maximum	**8.1837**	**30.0592**	**37.4133**	**0.0638**	**7.2238**	**1.3007**	**8.1711**	**3.9202**	**1.3006**	**4.8674**						**6,230.6968**

CalPoly Oppenheimer - Phase III - San Luis Obispo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	27.88	26.98	-10.14	0.00	52.89	21.45	49.24	56.75	15.53	48.55	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3053	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Energy	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Mobile	2.0569	8.7483	26.2171	0.0838	8.3852	0.0763	8.4615	2.2395	0.0714	2.3109						8,469.9011
Total	**4.4313**	**9.3754**	**26.7531**	**0.0876**	**8.3852**	**0.1240**	**8.5092**	**2.2395**	**0.1191**	**2.3586**						**9,226.7584**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0815	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Energy	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Mobile	2.0569	8.7483	26.2171	0.0838	8.3852	0.0763	8.4615	2.2395	0.0714	2.3109						8,469.9011
Total	**4.2074**	**9.3754**	**26.7531**	**0.0876**	**8.3852**	**0.1240**	**8.5092**	**2.2395**	**0.1191**	**2.3586**						**9,226.7584**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	7/4/2022	5	420	
5	Architectural Coating	Architectural Coating	7/5/2022	9/26/2022	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 132,225; Non-Residential Outdoor: 44,075; Striped Parking Area: 10,533 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Scrapers	2	8.00	367	0.48
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	22.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	111.00	43.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	31.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3420	0.0000	0.3420	0.0518	0.0000	0.0518						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.3420**	**1.6587**	**2.0007**	**0.0518**	**1.5419**	**1.5936**						**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0137	0.4924	0.1119	1.2100e-003	0.0271	2.2000e-003	0.0293	7.4100e-003	2.1000e-003	9.5100e-003						130.4935
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0868**	**0.5531**	**0.6299**	**2.5400e-003**	**0.1753**	**3.1500e-003**	**0.1785**	**0.0467**	**2.9800e-003**	**0.0497**						**262.6968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1334	0.0000	0.1334	0.0202	0.0000	0.0202						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1334**	**0.8627**	**0.9961**	**0.0202**	**0.8627**	**0.8829**						**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0137	0.4924	0.1119	1.2100e-003	0.0271	2.2000e-003	0.0293	7.4100e-003	2.1000e-003	9.5100e-003						130.4935
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0868**	**0.5531**	**0.6299**	**2.5400e-003**	**0.1753**	**3.1500e-003**	**0.1785**	**0.0467**	**2.9800e-003**	**0.0497**						**262.6968**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,054.4257**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1649	4.4157	1.4320	8.4200e-003	0.1996	0.0249	0.2245	0.0575	0.0238	0.0813						897.1555
Worker	0.5412	0.4495	3.8333	9.8200e-003	1.0974	7.0200e-003	1.1044	0.2910	6.4800e-003	0.2975						978.3042
Total	**0.7061**	**4.8652**	**5.2653**	**0.0182**	**1.2970**	**0.0319**	**1.3288**	**0.3485**	**0.0303**	**0.3788**						**1,875.4597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1649	4.4157	1.4320	8.4200e-003	0.1996	0.0249	0.2245	0.0575	0.0238	0.0813						897.1555
Worker	0.5412	0.4495	3.8333	9.8200e-003	1.0974	7.0200e-003	1.1044	0.2910	6.4800e-003	0.2975						978.3042
Total	**0.7061**	**4.8652**	**5.2653**	**0.0182**	**1.2970**	**0.0319**	**1.3288**	**0.3485**	**0.0303**	**0.3788**						**1,875.4597**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1357	4.0378	1.2698	8.3600e-003	0.1996	0.0121	0.2117	0.0575	0.0116	0.0691						891.5005
Worker	0.5050	0.4019	3.4717	9.4800e-003	1.0974	6.8000e-003	1.1042	0.2910	6.2700e-003	0.2973						944.8988
Total	**0.6407**	**4.4397**	**4.7416**	**0.0178**	**1.2970**	**0.0189**	**1.3159**	**0.3485**	**0.0178**	**0.3664**						**1,836.3993**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1357	4.0378	1.2698	8.3600e-003	0.1996	0.0121	0.2117	0.0575	0.0116	0.0691						891.5005
Worker	0.5050	0.4019	3.4717	9.4800e-003	1.0974	6.8000e-003	1.1042	0.2910	6.2700e-003	0.2973						944.8988
Total	**0.6407**	**4.4397**	**4.7416**	**0.0178**	**1.2970**	**0.0189**	**1.3159**	**0.3485**	**0.0178**	**0.3664**						**1,836.3993**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1256	3.8370	1.1739	8.2900e-003	0.1997	0.0106	0.2103	0.0575	0.0102	0.0677						885.1663
Worker	0.4749	0.3614	3.1781	9.1400e-003	1.0974	6.6000e-003	1.1040	0.2910	6.0900e-003	0.2971						911.0772
Total	**0.6005**	**4.1984**	**4.3520**	**0.0174**	**1.2970**	**0.0172**	**1.3143**	**0.3486**	**0.0163**	**0.3648**						**1,796.2435**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.1256	3.8370	1.1739	8.2900e-003	0.1997	0.0106	0.2103	0.0575	0.0102	0.0677						885.1663
Worker	0.4749	0.3614	3.1781	9.1400e-003	1.0974	6.6000e-003	1.1040	0.2910	6.0900e-003	0.2971						911.0772
Total	**0.6005**	**4.1984**	**4.3520**	**0.0174**	**1.2970**	**0.0172**	**1.3143**	**0.3486**	**0.0163**	**0.3648**						**1,796.2435**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0301					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**8.2346**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0941	0.0716	0.6299	1.8100e-003	0.2175	1.3100e-003	0.2188	0.0577	1.2100e-003	0.0589						180.5739
Total	**0.0941**	**0.0716**	**0.6299**	**1.8100e-003**	**0.2175**	**1.3100e-003**	**0.2188**	**0.0577**	**1.2100e-003**	**0.0589**						**180.5739**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0301					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**8.0895**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0941	0.0716	0.6299	1.8100e-003	0.2175	1.3100e-003	0.2188	0.0577	1.2100e-003	0.0589						180.5739
Total	**0.0941**	**0.0716**	**0.6299**	**1.8100e-003**	**0.2175**	**1.3100e-003**	**0.2188**	**0.0577**	**1.2100e-003**	**0.0589**						**180.5739**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0569	8.7483	26.2171	0.0838	8.3852	0.0763	8.4615	2.2395	0.0714	2.3109						8,469.9011
Unmitigated	2.0569	8.7483	26.2171	0.0838	8.3852	0.0763	8.4615	2.2395	0.0714	2.3109						8,469.9011

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,199.99	0.00	0.00	2,828,840	2,828,840
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,199.99	0.00	0.00	2,828,840	2,828,840

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Non-Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299
Other Asphalt Surfaces	0.582546	0.028575	0.198242	0.117308	0.024121	0.006096	0.012865	0.019735	0.002341	0.001188	0.004913	0.000770	0.001299

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
NaturalGas Unmitigated	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	6395.1	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0690**	**0.6270**	**0.5267**	**3.7600e-003**		**0.0477**	**0.0477**		**0.0477**	**0.0477**						**756.8358**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	6.3951	0.0690	0.6270	0.5267	3.7600e-003		0.0477	0.0477		0.0477	0.0477						756.8358
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0690**	**0.6270**	**0.5267**	**3.7600e-003**		**0.0477**	**0.0477**		**0.0477**	**0.0477**						**756.8358**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0815	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Unmitigated	2.3053	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3559					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9486					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Total	**2.3053**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0215**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1320					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.9486					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.7000e-004	9.0000e-005	9.4100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0215
Total	**2.0815**	**9.0000e-005**	**9.4100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0215**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase IV

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	60.00	1000sqft	1.38	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Winter

Project Characteristics - Phase IV only.

Land Use - 60000 sf greenhouse,

Construction Phase - Based on model defaults. site prep 2 days, grading 4 days, construction 550 days. Arch coating for greenhouse considered minimal.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating -

Vehicle Trips - No increase in mobile trips

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	550.00
tblConstructionPhase	PhaseEndDate	3/2/2020	8/31/2020
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2021
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.7958	20.7892	15.4276	0.0264	5.8787	1.0710	6.8315	2.9747	1.0340	3.8513						2,485.1211
2019	2.4538	17.2204	14.8474	0.0263	0.2936	0.9268	1.2203	0.0789	0.8949	0.9739						2,464.1974
2020	2.1907	15.9164	14.3845	0.0262	0.2936	0.8033	1.0969	0.0789	0.7758	0.8547						2,439.4263
Maximum	**2.7958**	**20.7892**	**15.4276**	**0.0264**	**5.8787**	**1.0710**	**6.8315**	**2.9747**	**1.0340**	**3.8513**						**2,485.1211**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.8447	13.3917	15.0295	0.0264	2.3409	0.7445	2.7162	1.1729	0.7439	1.5481						2,485.1210
2019	0.8225	13.3169	14.8390	0.0263	0.2936	0.7424	1.0360	0.0789	0.7419	0.8208						2,464.1974
2020	0.8010	13.2048	14.6750	0.0262	0.2936	0.7389	1.0324	0.0789	0.7385	0.8174						2,439.4263
Maximum	**0.8447**	**13.3917**	**15.0295**	**0.0264**	**2.3409**	**0.7445**	**2.7162**	**1.1729**	**0.7439**	**1.5481**						**2,485.1210**

CalPoly Oppenheimer - Phase IV - San Luis Obispo County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**66.83**	**25.98**	**0.26**	**0.00**	**54.71**	**20.54**	**47.70**	**57.52**	**17.76**	**43.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5132	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Energy	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**1.5601**	**0.4268**	**0.3646**	**2.5600e-003**	**0.0000**	**0.0325**	**0.0325**	**0.0000**	**0.0325**	**0.0325**						**515.1603**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3608	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Energy	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**1.4077**	**0.4268**	**0.3646**	**2.5600e-003**	**0.0000**	**0.0325**	**0.0325**	**0.0000**	**0.0325**	**0.0325**						**515.1603**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/29/2018	6/11/2018	5	2	
2	Grading	Grading	6/12/2018	7/23/2018	5	4	
3	Building Construction	Building Construction	7/24/2018	8/31/2020	5	550	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537						0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761						1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**						**1,748.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0476	0.0420	0.3596	7.5000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						74.9810
Total	**0.0476**	**0.0420**	**0.3596**	**7.5000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**74.9810**

3.2 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2618	0.0000	2.2618	1.1519	0.0000	1.1519						0.0000
Off-Road	0.4212	8.4089	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747						1,748.8690
Total	**0.4212**	**8.4089**	**9.8221**	**0.0172**	**2.2618**	**0.3747**	**2.6365**	**1.1519**	**0.3747**	**1.5267**						**1,748.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0476	0.0420	0.3596	7.5000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						74.9810
Total	**0.0476**	**0.0420**	**0.3596**	**7.5000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**74.9810**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256						0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311						1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**						**1,432.3219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0476	0.0420	0.3596	7.5000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						74.9810
Total	**0.0476**	**0.0420**	**0.3596**	**7.5000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**74.9810**

3.3 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9166	0.0000	1.9166	0.9850	0.0000	0.9850						0.0000
Off-Road	0.3450	6.9025	8.0841	0.0141		0.3106	0.3106		0.3106	0.3106						1,432.3219
Total	**0.3450**	**6.9025**	**8.0841**	**0.0141**	**1.9166**	**0.3106**	**2.2272**	**0.9850**	**0.3106**	**1.2956**						**1,432.3219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0476	0.0420	0.3596	7.5000e-004	0.0791	5.4000e-004	0.0796	0.0210	5.0000e-004	0.0215						74.9810
Total	**0.0476**	**0.0420**	**0.3596**	**7.5000e-004**	**0.0791**	**5.4000e-004**	**0.0796**	**0.0210**	**5.0000e-004**	**0.0215**						**74.9810**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216						2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**						**2,041.0596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0553	1.1837	0.4273	1.9700e-003	0.0464	0.0113	0.0577	0.0134	0.0108	0.0242						209.7457
Worker	0.1486	0.1313	1.1237	2.3500e-003	0.2472	1.6900e-003	0.2488	0.0656	1.5600e-003	0.0671						234.3158
Total	**0.2039**	**1.3151**	**1.5510**	**4.3200e-003**	**0.2936**	**0.0130**	**0.3065**	**0.0789**	**0.0124**	**0.0913**						**444.0615**

3.4 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,041.0596
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,041.0596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0553	1.1837	0.4273	1.9700e-003	0.0464	0.0113	0.0577	0.0134	0.0108	0.0242						209.7457
Worker	0.1486	0.1313	1.1237	2.3500e-003	0.2472	1.6900e-003	0.2488	0.0656	1.5600e-003	0.0671						234.3158
Total	**0.2039**	**1.3151**	**1.5510**	**4.3200e-003**	**0.2936**	**0.0130**	**0.3065**	**0.0789**	**0.0124**	**0.0913**						**444.0615**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846						2,027.7210
Total	**2.2721**	**15.9802**	**13.4870**	**0.0220**		**0.9158**	**0.9158**		**0.8846**	**0.8846**						**2,027.7210**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0481	1.1253	0.3777	1.9600e-003	0.0464	9.2700e-003	0.0557	0.0134	8.8700e-003	0.0222						209.0745
Worker	0.1336	0.1150	0.9827	2.2800e-003	0.2472	1.6300e-003	0.2488	0.0656	1.5100e-003	0.0671						227.4019
Total	**0.1817**	**1.2402**	**1.3604**	**4.2400e-003**	**0.2936**	**0.0109**	**0.3045**	**0.0789**	**0.0104**	**0.0893**						**436.4764**

3.4 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,027.7210
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,027.7210**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0481	1.1253	0.3777	1.9600e-003	0.0464	9.2700e-003	0.0557	0.0134	8.8700e-003	0.0222						209.0745
Worker	0.1336	0.1150	0.9827	2.2800e-003	0.2472	1.6300e-003	0.2488	0.0656	1.5100e-003	0.0671						227.4019
Total	**0.1817**	**1.2402**	**1.3604**	**4.2400e-003**	**0.2936**	**0.0109**	**0.3045**	**0.0789**	**0.0104**	**0.0893**						**436.4764**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688						2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**						**2,010.4467**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0384	1.0269	0.3330	1.9600e-003	0.0464	5.7800e-003	0.0522	0.0134	5.5300e-003	0.0189						208.6408
Worker	0.1219	0.1012	0.8634	2.2100e-003	0.2472	1.5800e-003	0.2487	0.0656	1.4600e-003	0.0670						220.3388
Total	**0.1602**	**1.1282**	**1.1964**	**4.1700e-003**	**0.2936**	**7.3600e-003**	**0.3009**	**0.0789**	**6.9900e-003**	**0.0859**						**428.9796**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6407	12.0767	13.4786	0.0220		0.7315	0.7315		0.7315	0.7315						2,010.4467
Total	**0.6407**	**12.0767**	**13.4786**	**0.0220**		**0.7315**	**0.7315**		**0.7315**	**0.7315**						**2,010.4467**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0384	1.0269	0.3330	1.9600e-003	0.0464	5.7800e-003	0.0522	0.0134	5.5300e-003	0.0189						208.6408
Worker	0.1219	0.1012	0.8634	2.2100e-003	0.2472	1.5800e-003	0.2487	0.0656	1.4600e-003	0.0670						220.3388
Total	**0.1602**	**1.1282**	**1.1964**	**4.1700e-003**	**0.2936**	**7.3600e-003**	**0.3009**	**0.0789**	**6.9900e-003**	**0.0859**						**428.9796**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.567875	0.030811	0.198391	0.124124	0.028385	0.006896	0.012949	0.019383	0.002368	0.001236	0.005232	0.000797	0.001552

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
NaturalGas Unmitigated	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4352.88	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Total		**0.0469**	**0.4268**	**0.3585**	**2.5600e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**						**515.1463**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	4.35288	0.0469	0.4268	0.3585	2.5600e-003		0.0324	0.0324		0.0324	0.0324						515.1463
Total		**0.0469**	**0.4268**	**0.3585**	**2.5600e-003**		**0.0324**	**0.0324**		**0.0324**	**0.0324**						**515.1463**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3608	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Unmitigated	1.5132	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2286					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.7000e-004	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Total	**1.5132**	**6.0000e-005**	**6.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						**0.0140**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0762					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.7000e-004	6.0000e-005	6.1500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						0.0140
Total	**1.3608**	**6.0000e-005**	**6.1500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						**0.0140**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase I 2020

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.49	1000sqft	23.30	9,486.00	0
Other Non-Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	488.3	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase I 2020 - San Luis Obispo County, Annual

Project Characteristics - Phase I only.

Land Use - 9.486sf of building area, 1.7 acres other/non-asphalt surfaces

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 35 days, construction 90 days, coating 20 days. Construction adjusted to reflect overall construction period of 8 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	4,443.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	90.00
tblLandUse	BuildingSpaceSquareFeet	9,490.00	9,486.00
tblLandUse	LandUseSquareFeet	9,490.00	9,486.00
tblLandUse	LotAcreage	0.22	23.30
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	488.3

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tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2018	2020
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tblVehicleEF	LDT2	271.35	390.62
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.10	0.42
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003

tblVehicleEF	LDT2	0.04	0.08
tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.08	0.32
tblVehicleEF	LDT2	2.7180e-003	3.9240e-003
tblVehicleEF	LDT2	6.7800e-004	9.9000e-004
tblVehicleEF	LDT2	0.04	0.08
tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LDT2	4.6700e-003	0.02
tblVehicleEF	LDT2	5.1140e-003	0.02
tblVehicleEF	LDT2	0.64	1.60
tblVehicleEF	LDT2	1.15	3.52
tblVehicleEF	LDT2	282.44	406.52
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.10	0.38
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003

tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	2.8300e-003	4.0840e-003
tblVehicleEF	LDT2	6.7500e-004	9.7800e-004
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	4.3310e-003	0.01
tblVehicleEF	LDT2	6.1920e-003	0.03
tblVehicleEF	LDT2	0.59	1.48
tblVehicleEF	LDT2	1.47	4.58
tblVehicleEF	LDT2	269.14	387.45
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.11	0.44
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003

tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	2.6960e-003	3.8920e-003
tblVehicleEF	LDT2	6.8000e-004	9.9600e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.93	1.79
tblVehicleEF	LHD1	1.87	3.06
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.63	3.11
tblVehicleEF	LHD1	0.78	0.95

tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9300e-004	3.3000e-004
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.20	0.33
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03

tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.94	1.82
tblVehicleEF	LHD1	1.75	2.86
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.57	3.00
tblVehicleEF	LHD1	0.74	0.89
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.18	0.29
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005

tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9100e-004	3.2600e-004
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.16	0.25
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.19	0.32
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.92	1.78
tblVehicleEF	LHD1	1.93	3.16
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.62	3.08
tblVehicleEF	LHD1	0.81	0.98
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003

tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8650e-003
tblVehicleEF	LHD1	2.9400e-004	3.3200e-004
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.21	0.34
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0770e-003	0.01
tblVehicleEF	LHD2	3.6530e-003	9.9930e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.82	1.29
tblVehicleEF	LHD2	14.29	15.42

tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.60	2.72
tblVehicleEF	LHD2	0.28	0.49
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.1140e-003	0.01
tblVehicleEF	LHD2	3.5240e-003	9.5060e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.03
tblVehicleEF	LHD2	0.77	1.21
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.58	2.63
tblVehicleEF	LHD2	0.27	0.46
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
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tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0570e-003	0.01
tblVehicleEF	LHD2	3.7240e-003	0.01
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.84	1.33
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.59	2.70

tblVehicleEF	LHD2	0.28	0.50
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	MCY	0.43	0.39

tblVehicleEF	MCY	0.16	0.18
tblVehicleEF	MCY	18.71	23.95
tblVehicleEF	MCY	10.37	10.07
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.17	1.23
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.14	2.47
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.25	2.47
tblVehicleEF	MCY	2.0370e-003	2.0600e-003
tblVehicleEF	MCY	6.9300e-004	7.4100e-004
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.66	2.94
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.44	2.68
tblVehicleEF	MCY	0.42	0.37

tblVehicleEF	MCY	0.14	0.15
tblVehicleEF	MCY	17.66	22.30
tblVehicleEF	MCY	9.19	9.05
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.06	1.11
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.07	2.34
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	1.93	2.09
tblVehicleEF	MCY	2.0180e-003	2.0290e-003
tblVehicleEF	MCY	6.6500e-004	7.1300e-004
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.57	2.79
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	2.10	2.27
tblVehicleEF	MCY	0.44	0.40

tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	19.44	25.08
tblVehicleEF	MCY	10.99	10.63
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.18	1.24
tblVehicleEF	MCY	0.33	0.34
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.18	2.55
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.41	2.66
tblVehicleEF	MCY	2.0500e-003	2.0800e-003
tblVehicleEF	MCY	7.0800e-004	7.5600e-004
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.71	3.03
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.62	2.89
tblVehicleEF	MDV	7.1160e-003	0.02

tblVehicleEF	MDV	0.01	0.03
tblVehicleEF	MDV	0.79	2.10
tblVehicleEF	MDV	2.28	5.67
tblVehicleEF	MDV	365.97	513.88
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.21	0.60
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.16	0.47
tblVehicleEF	MDV	3.6620e-003	5.1620e-003
tblVehicleEF	MDV	9.1900e-004	1.2860e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.18	0.52
tblVehicleEF	MDV	7.5450e-003	0.02

tblVehicleEF	MDV	0.01	0.03
tblVehicleEF	MDV	0.85	2.21
tblVehicleEF	MDV	1.91	4.74
tblVehicleEF	MDV	380.55	534.42
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.10	0.29
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.14	0.41
tblVehicleEF	MDV	3.8090e-003	5.3690e-003
tblVehicleEF	MDV	9.1300e-004	1.2690e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.15	0.45
tblVehicleEF	MDV	6.9970e-003	0.02

tblVehicleEF	MDV	0.01	0.04
tblVehicleEF	MDV	0.78	2.09
tblVehicleEF	MDV	2.45	6.12
tblVehicleEF	MDV	363.07	509.79
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.22	0.63
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.17	0.50
tblVehicleEF	MDV	3.6330e-003	5.1210e-003
tblVehicleEF	MDV	9.2200e-004	1.2940e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MH	0.01	0.07

tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.87	6.14
tblVehicleEF	MH	4.40	9.22
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.77	1.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.58
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3900e-004	8.0700e-004
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03

tblVehicleEF	MH	0.29	0.64
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.89	6.17
tblVehicleEF	MH	4.08	8.53
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.73	1.02
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.07	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.25	0.55
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3300e-004	7.9500e-004
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77

tblVehicleEF	MH	0.09	0.34
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.28	0.60
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.86	6.15
tblVehicleEF	MH	4.54	9.55
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.80	1.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.60
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4100e-004	8.1300e-004
tblVehicleEF	MH	0.54	0.91

tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.30	0.66
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9950e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.35	0.60
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tblVehicleEF	MHD	0.45	1.39
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tblVehicleEF	MHD	11.30	10.90
tblVehicleEF	MHD	1.2800e-004	8.2220e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.2300e-004	7.8670e-003
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tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.02	0.05

tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.73
tblVehicleEF	MHD	1.4160e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9900e-004	8.6500e-004
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
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tblVehicleEF	MHD	3.0230e-003	0.02
tblVehicleEF	MHD	0.03	0.09
tblVehicleEF	MHD	0.23	0.41
tblVehicleEF	MHD	0.27	1.37
tblVehicleEF	MHD	3.61	11.15
tblVehicleEF	MHD	156.26	151.37
tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.46	1.43
tblVehicleEF	MHD	1.22	4.18
tblVehicleEF	MHD	11.27	10.81

tblVehicleEF	MHD	1.0800e-004	6.9320e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.0300e-004	6.6320e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.23	0.69
tblVehicleEF	MHD	1.5010e-003	1.4560e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9400e-004	8.5100e-004
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.25	0.75
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9790e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.44	0.77

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tblVehicleEF	MHD	135.45	131.22
tblVehicleEF	MHD	1,174.80	1,226.01
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tblVehicleEF	MHD	0.43	1.32
tblVehicleEF	MHD	1.25	4.30
tblVehicleEF	MHD	11.32	10.95
tblVehicleEF	MHD	1.5600e-004	0.01
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tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.4900e-004	9.5720e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.75
tblVehicleEF	MHD	1.3040e-003	1.2660e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.0100e-004	8.7300e-004
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10

tblVehicleEF	MHD	0.03	0.07
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.27	0.82
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tblVehicleEF	OBUS	4.7130e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.24	0.28
tblVehicleEF	OBUS	0.37	1.36
tblVehicleEF	OBUS	4.77	8.89
tblVehicleEF	OBUS	136.21	95.08
tblVehicleEF	OBUS	1,284.15	1,343.57
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tblVehicleEF	OBUS	2.2470e-003	2.4270e-003
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tblVehicleEF	OBUS	1.08	2.82
tblVehicleEF	OBUS	3.70	3.21
tblVehicleEF	OBUS	2.8000e-005	3.6900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.7000e-005	3.5300e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.04

tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.30	0.56
tblVehicleEF	OBUS	1.3110e-003	9.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	8.6600e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
tblVehicleEF	OBUS	0.06	0.15
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	0.33	0.61
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.23	0.26
tblVehicleEF	OBUS	0.38	1.39
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tblVehicleEF	OBUS	1,284.15	1,343.57
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tblVehicleEF	OBUS	3.65	3.12

tblVehicleEF	OBUS	2.4000e-005	3.1100e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.3000e-005	2.9800e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
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tblVehicleEF	OBUS	0.28	0.53
tblVehicleEF	OBUS	1.3790e-003	9.6400e-004
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tblVehicleEF	OBUS	7.0600e-004	8.5500e-004
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tblVehicleEF	OBUS	1.1430e-003	1.2570e-003
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tblVehicleEF	OBUS	0.31	0.58
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	1,284.15	1,343.57
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tblVehicleEF	OBUS	1.07	2.80
tblVehicleEF	OBUS	3.72	3.25
tblVehicleEF	OBUS	3.4000e-005	4.4900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	3.3000e-005	4.3000e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
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tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
tblVehicleEF	OBUS	0.05	0.12
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	0.31	0.57
tblVehicleEF	OBUS	1.2160e-003	8.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1400e-004	8.7100e-004
tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03

tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
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tblVehicleEF	SBUS	0.81	0.83
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tblVehicleEF	SBUS	6.62	7.35
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tblVehicleEF	SBUS	1,145.19	1,180.91
tblVehicleEF	SBUS	1,093.88	1,103.99
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tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.70	12.02
tblVehicleEF	SBUS	2.23	6.23
tblVehicleEF	SBUS	13.61	14.11
tblVehicleEF	SBUS	2.9560e-003	0.02
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tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.8280e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003

tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.88
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.39	1.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.9100e-004	8.7900e-004
tblVehicleEF	SBUS	2.7330e-003	8.4070e-003
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.42	1.12
tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.07	0.17
tblVehicleEF	SBUS	6.54	7.20
tblVehicleEF	SBUS	0.77	3.26
tblVehicleEF	SBUS	6.36	17.53
tblVehicleEF	SBUS	1,199.90	1,236.25
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.88	12.40

tblVehicleEF	SBUS	2.15	5.99
tblVehicleEF	SBUS	13.58	14.02
tblVehicleEF	SBUS	2.4920e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.3840e-003	0.01
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.87
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.91
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6500e-004	8.1000e-004
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.99

tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.20
tblVehicleEF	SBUS	6.73	7.56
tblVehicleEF	SBUS	0.75	3.14
tblVehicleEF	SBUS	8.48	23.35
tblVehicleEF	SBUS	1,069.66	1,104.48
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.45	11.49
tblVehicleEF	SBUS	2.21	6.19
tblVehicleEF	SBUS	13.62	14.15
tblVehicleEF	SBUS	3.5960e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	3.4410e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	0.79	0.88
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.02	0.07

tblVehicleEF	SBUS	0.40	1.07
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.0100e-004	9.0600e-004
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	1.14	1.27
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	1.17
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	2.01	4.92
tblVehicleEF	UBUS	8.63	9.83
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.51	10.43
tblVehicleEF	UBUS	12.44	14.50
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003

tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.74
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5480e-003	1.3050e-003
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.20	0.85
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.81
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	2.02	4.97
tblVehicleEF	UBUS	7.31	8.16
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.38	10.08
tblVehicleEF	UBUS	12.37	14.43
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20

tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.70	0.66
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5240e-003	1.2760e-003
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.20	0.86
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.72
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.06
tblVehicleEF	UBUS	2.01	4.90
tblVehicleEF	UBUS	9.27	10.63
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.48	10.34
tblVehicleEF	UBUS	12.48	14.53
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004

tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.16	0.68
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.81	0.78
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5590e-003	1.3190e-003
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.20	0.84
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.89	0.85
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3498	3.1962	2.0093	3.2700e-003	0.2715	0.1734	0.4449	0.1199	0.1615	0.2814						300.0825
Maximum	**0.3498**	**3.1962**	**2.0093**	**3.2700e-003**	**0.2715**	**0.1734**	**0.4449**	**0.1199**	**0.1615**	**0.2814**						**300.0825**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1113	1.5584	1.9731	3.2700e-003	0.1210	0.0788	0.1998	0.0508	0.0788	0.1296						300.0822
Maximum	**0.1113**	**1.5584**	**1.9731**	**3.2700e-003**	**0.1210**	**0.0788**	**0.1998**	**0.0508**	**0.0788**	**0.1296**						**300.0822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.18**	**51.24**	**1.80**	**0.00**	**55.44**	**54.55**	**55.09**	**57.63**	**51.23**	**53.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2017	7-31-2017	2.0593	0.8626
2	8-1-2017	9-30-2017	0.6951	0.3733
		Highest	2.0593	0.8626

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						31.2488
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						5.9192
Water						0.0000	0.0000		0.0000	0.0000						5.6283
Total	**0.0513**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**42.7966**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						31.2488
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						2.9596
Water						0.0000	0.0000		0.0000	0.0000						4.5026
Total	**0.0470**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**38.7114**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**8.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.55**

3.0 Construction Detail

Construction Phase

CalPoly Oppenheimer - Phase I 2020 - San Luis Obispo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2017	5/26/2017	5	20	
2	Site Preparation	Site Preparation	5/27/2017	6/9/2017	5	10	
3	Grading	Grading	6/10/2017	7/28/2017	5	35	
4	Building Construction	Building Construction	7/29/2017	12/1/2017	5	90	
5	Architectural Coating	Architectural Coating	12/2/2017	12/29/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 1.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,229; Non-Residential Outdoor: 4,743; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CalPoly Oppenheimer - Phase I 2020 - San Luis Obispo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Rubber Tired Dozers	3	8.00	247	0.40
	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	7.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004						0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204						35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**4.6300e-003**	**0.0219**	**0.0266**	**7.0000e-004**	**0.0204**	**0.0211**						**35.8438**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						35.8438
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.8100e-003**	**8.6300e-003**	**0.0104**	**2.7000e-004**	**8.6300e-003**	**8.9000e-003**						**35.8438**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132						17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0903**	**0.0144**	**0.1047**	**0.0497**	**0.0132**	**0.0629**						**17.8025**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						17.8025
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0352**	**4.7300e-003**	**0.0400**	**0.0194**	**4.7300e-003**	**0.0241**						**17.8025**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629						0.0000
Off-Road	0.1006	1.1889	0.6787	1.0900e-003		0.0538	0.0538		0.0495	0.0495						101.5013
Total	**0.1006**	**1.1889**	**0.6787**	**1.0900e-003**	**0.1518**	**0.0538**	**0.2056**	**0.0629**	**0.0495**	**0.1124**						**101.5013**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0592	0.0000	0.0592	0.0246	0.0000	0.0246						0.0000
Off-Road	0.0267	0.5246	0.6426	1.0900e-003		0.0227	0.0227		0.0227	0.0227						101.5012
Total	**0.0267**	**0.5246**	**0.6426**	**1.0900e-003**	**0.0592**	**0.0227**	**0.0819**	**0.0246**	**0.0227**	**0.0473**						**101.5012**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1402	1.1950	0.8182	1.2100e-003		0.0805	0.0805		0.0756	0.0756						108.8883
Total	**0.1402**	**1.1950**	**0.8182**	**1.2100e-003**		**0.0805**	**0.0805**		**0.0756**	**0.0756**						**108.8883**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.6402	0.8043	1.2100e-003		0.0407	0.0407		0.0407	0.0407						108.8882
Total	**0.0303**	**0.6402**	**0.8043**	**1.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**						**108.8882**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003						2.5600
Total	**0.0253**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**						**2.5600**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004						2.5600
Total	**0.0226**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**						**2.5600**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.559162	0.032279	0.198583	0.128083	0.030808	0.007362	0.013004	0.019140	0.002385	0.001267	0.005421	0.000811	0.001695
Other Non-Asphalt Surfaces	0.559162	0.032279	0.198583	0.128083	0.030808	0.007362	0.013004	0.019140	0.002385	0.001267	0.005421	0.000811	0.001695

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						17.7647
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						17.7647
NaturalGas Mitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
NaturalGas Unmitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				17.7647
Other Non-Asphalt Surfaces	0				0.0000
Total					**17.7647**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				17.7647
Other Non-Asphalt Surfaces	0				0.0000
Total					**17.7647**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Unmitigated	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.1400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0500**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.7400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0456**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				4.5026
Unmitigated				5.6283

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.19456 / 0				5.6283
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**5.6283**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.75565 / 0				4.5026
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**4.5026**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				2.9596
Unmitigated				5.9192

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	11.77				5.9192
Other Non-Asphalt Surfaces	0				0.0000
Total					**5.9192**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.885				2.9596
Other Non-Asphalt Surfaces	0				0.0000
Total					**2.9596**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase I 2030

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	9.49	1000sqft	23.30	9,486.00	0
Other Non-Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	364.4	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase I 2030 - San Luis Obispo County, Annual

Project Characteristics - Phase I only.

Land Use - 9.486sf of building area, 1.7 acres other/non-asphalt surfaces

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 35 days, construction 90 days, coating 20 days. Construction adjusted to reflect overall construction period of 8 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	4,443.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	370.00	90.00
tblLandUse	BuildingSpaceSquareFeet	9,490.00	9,486.00
tblLandUse	LandUseSquareFeet	9,490.00	9,486.00
tblLandUse	LotAcreage	0.22	23.30
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	364.4

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tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
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tblVehicleEF	LDT2	0.04	0.08
tblVehicleEF	LDT2	0.12	0.23
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.09	0.35
tblVehicleEF	LDT2	4.6700e-003	0.02
tblVehicleEF	LDT2	5.1140e-003	0.02
tblVehicleEF	LDT2	0.64	1.60
tblVehicleEF	LDT2	1.15	3.52
tblVehicleEF	LDT2	282.44	406.52
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.06	0.21
tblVehicleEF	LDT2	0.10	0.38
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003

tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	2.8300e-003	4.0840e-003
tblVehicleEF	LDT2	6.7500e-004	9.7800e-004
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.12	0.24
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	4.3310e-003	0.01
tblVehicleEF	LDT2	6.1920e-003	0.03
tblVehicleEF	LDT2	0.59	1.48
tblVehicleEF	LDT2	1.47	4.58
tblVehicleEF	LDT2	269.14	387.45
tblVehicleEF	LDT2	65.55	91.49
tblVehicleEF	LDT2	0.20	0.20
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	0.11	0.44
tblVehicleEF	LDT2	1.3450e-003	1.9170e-003
tblVehicleEF	LDT2	2.1400e-003	2.8550e-003
tblVehicleEF	LDT2	1.2370e-003	1.7640e-003
tblVehicleEF	LDT2	1.9670e-003	2.6280e-003

tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	2.6960e-003	3.8920e-003
tblVehicleEF	LDT2	6.8000e-004	9.9600e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.12	0.25
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.10	0.17
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.93	1.79
tblVehicleEF	LHD1	1.87	3.06
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.63	3.11
tblVehicleEF	LHD1	0.78	0.95

tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
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tblVehicleEF	LHD1	2.1010e-003	2.3790e-003
tblVehicleEF	LHD1	0.10	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2580e-003	1.2200e-003
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.44	0.35
tblVehicleEF	LHD1	0.20	0.33
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03

tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.94	1.82
tblVehicleEF	LHD1	1.75	2.86
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.57	3.00
tblVehicleEF	LHD1	0.74	0.89
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003
tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.18	0.29
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005

tblVehicleEF	LHD1	6.4670e-003	6.8660e-003
tblVehicleEF	LHD1	2.9100e-004	3.2600e-004
tblVehicleEF	LHD1	3.6080e-003	4.2260e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	2.0740e-003
tblVehicleEF	LHD1	0.16	0.25
tblVehicleEF	LHD1	0.42	0.33
tblVehicleEF	LHD1	0.19	0.32
tblVehicleEF	LHD1	4.0810e-003	5.0480e-003
tblVehicleEF	LHD1	0.01	0.03
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.13	0.14
tblVehicleEF	LHD1	0.92	1.78
tblVehicleEF	LHD1	1.93	3.16
tblVehicleEF	LHD1	9.33	9.57
tblVehicleEF	LHD1	661.68	700.66
tblVehicleEF	LHD1	25.80	27.24
tblVehicleEF	LHD1	0.01	0.04
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	1.62	3.08
tblVehicleEF	LHD1	0.81	0.98
tblVehicleEF	LHD1	9.9300e-004	1.1550e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	7.3400e-004	1.1480e-003
tblVehicleEF	LHD1	9.5000e-004	1.1050e-003

tblVehicleEF	LHD1	2.6010e-003	2.5780e-003
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.7500e-004	1.0570e-003
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.13	0.20
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.19	0.31
tblVehicleEF	LHD1	9.2000e-005	9.5000e-005
tblVehicleEF	LHD1	6.4670e-003	6.8650e-003
tblVehicleEF	LHD1	2.9400e-004	3.3200e-004
tblVehicleEF	LHD1	1.5610e-003	1.7420e-003
tblVehicleEF	LHD1	0.12	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.9300e-004	9.5800e-004
tblVehicleEF	LHD1	0.16	0.24
tblVehicleEF	LHD1	0.48	0.38
tblVehicleEF	LHD1	0.21	0.34
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0770e-003	0.01
tblVehicleEF	LHD2	3.6530e-003	9.9930e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.82	1.29
tblVehicleEF	LHD2	14.29	15.42

tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.60	2.72
tblVehicleEF	LHD2	0.28	0.49
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	5.0300e-004	8.8400e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02

tblVehicleEF	LHD2	3.3800e-004	4.8300e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.1140e-003	0.01
tblVehicleEF	LHD2	3.5240e-003	9.5060e-003
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.03
tblVehicleEF	LHD2	0.77	1.21
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.58	2.63
tblVehicleEF	LHD2	0.27	0.46
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.13
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
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tblVehicleEF	LHD2	8.6100e-004	1.5580e-003
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.5300e-004	8.1600e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	2.3990e-003	3.1970e-003
tblVehicleEF	LHD2	6.0570e-003	0.01
tblVehicleEF	LHD2	3.7240e-003	0.01
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.55	1.02
tblVehicleEF	LHD2	0.84	1.33
tblVehicleEF	LHD2	14.29	15.42
tblVehicleEF	LHD2	678.94	729.14
tblVehicleEF	LHD2	19.47	18.83
tblVehicleEF	LHD2	4.4400e-003	8.4270e-003
tblVehicleEF	LHD2	0.09	0.15
tblVehicleEF	LHD2	0.59	2.70

tblVehicleEF	LHD2	0.28	0.50
tblVehicleEF	LHD2	1.2060e-003	1.5540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.3400e-004	4.6300e-004
tblVehicleEF	LHD2	1.1540e-003	1.4860e-003
tblVehicleEF	LHD2	2.7300e-003	2.7560e-003
tblVehicleEF	LHD2	0.01	0.03
tblVehicleEF	LHD2	3.0700e-004	4.2600e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.10	0.17
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.14
tblVehicleEF	LHD2	1.3900e-004	1.5000e-004
tblVehicleEF	LHD2	6.5880e-003	7.0670e-003
tblVehicleEF	LHD2	2.0900e-004	2.1300e-004
tblVehicleEF	LHD2	3.7100e-004	6.5100e-004
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.6700e-004	3.8000e-004
tblVehicleEF	LHD2	0.12	0.20
tblVehicleEF	LHD2	0.06	0.12
tblVehicleEF	LHD2	0.05	0.15
tblVehicleEF	MCY	0.43	0.39

tblVehicleEF	MCY	0.16	0.18
tblVehicleEF	MCY	18.71	23.95
tblVehicleEF	MCY	10.37	10.07
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.17	1.23
tblVehicleEF	MCY	0.32	0.32
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.14	2.47
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.25	2.47
tblVehicleEF	MCY	2.0370e-003	2.0600e-003
tblVehicleEF	MCY	6.9300e-004	7.4100e-004
tblVehicleEF	MCY	0.92	0.95
tblVehicleEF	MCY	0.81	1.03
tblVehicleEF	MCY	0.48	0.53
tblVehicleEF	MCY	2.66	2.94
tblVehicleEF	MCY	0.75	1.23
tblVehicleEF	MCY	2.44	2.68
tblVehicleEF	MCY	0.42	0.37

tblVehicleEF	MCY	0.14	0.15
tblVehicleEF	MCY	17.66	22.30
tblVehicleEF	MCY	9.19	9.05
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.06	1.11
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.07	2.34
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	1.93	2.09
tblVehicleEF	MCY	2.0180e-003	2.0290e-003
tblVehicleEF	MCY	6.6500e-004	7.1300e-004
tblVehicleEF	MCY	1.74	1.83
tblVehicleEF	MCY	0.91	1.09
tblVehicleEF	MCY	0.93	1.05
tblVehicleEF	MCY	2.57	2.79
tblVehicleEF	MCY	0.69	1.14
tblVehicleEF	MCY	2.10	2.27
tblVehicleEF	MCY	0.44	0.40

tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	19.44	25.08
tblVehicleEF	MCY	10.99	10.63
tblVehicleEF	MCY	166.84	160.04
tblVehicleEF	MCY	45.77	50.28
tblVehicleEF	MCY	4.2480e-003	5.8600e-003
tblVehicleEF	MCY	1.18	1.24
tblVehicleEF	MCY	0.33	0.34
tblVehicleEF	MCY	2.0380e-003	2.0270e-003
tblVehicleEF	MCY	3.3520e-003	5.9880e-003
tblVehicleEF	MCY	1.9040e-003	1.9140e-003
tblVehicleEF	MCY	3.1490e-003	5.6910e-003
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.18	2.55
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.41	2.66
tblVehicleEF	MCY	2.0500e-003	2.0800e-003
tblVehicleEF	MCY	7.0800e-004	7.5600e-004
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	1.01	1.32
tblVehicleEF	MCY	0.34	0.38
tblVehicleEF	MCY	2.71	3.03
tblVehicleEF	MCY	0.87	1.40
tblVehicleEF	MCY	2.62	2.89
tblVehicleEF	MDV	7.1160e-003	0.02

tblVehicleEF	MDV	0.01	0.03
tblVehicleEF	MDV	0.79	2.10
tblVehicleEF	MDV	2.28	5.67
tblVehicleEF	MDV	365.97	513.88
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.21	0.60
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.16	0.47
tblVehicleEF	MDV	3.6620e-003	5.1620e-003
tblVehicleEF	MDV	9.1900e-004	1.2860e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.18	0.23
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.12	0.14
tblVehicleEF	MDV	0.18	0.52
tblVehicleEF	MDV	7.5450e-003	0.02

tblVehicleEF	MDV	0.01	0.03
tblVehicleEF	MDV	0.85	2.21
tblVehicleEF	MDV	1.91	4.74
tblVehicleEF	MDV	380.55	534.42
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.10	0.29
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.14	0.41
tblVehicleEF	MDV	3.8090e-003	5.3690e-003
tblVehicleEF	MDV	9.1300e-004	1.2690e-003
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.19	0.24
tblVehicleEF	MDV	0.10	0.11
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.11	0.13
tblVehicleEF	MDV	0.15	0.45
tblVehicleEF	MDV	6.9970e-003	0.02

tblVehicleEF	MDV	0.01	0.04
tblVehicleEF	MDV	0.78	2.09
tblVehicleEF	MDV	2.45	6.12
tblVehicleEF	MDV	363.07	509.79
tblVehicleEF	MDV	87.97	118.36
tblVehicleEF	MDV	0.10	0.14
tblVehicleEF	MDV	0.11	0.33
tblVehicleEF	MDV	0.22	0.63
tblVehicleEF	MDV	1.3980e-003	1.9340e-003
tblVehicleEF	MDV	2.2230e-003	2.9750e-003
tblVehicleEF	MDV	1.2880e-003	1.7880e-003
tblVehicleEF	MDV	2.0440e-003	2.7430e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.17	0.50
tblVehicleEF	MDV	3.6330e-003	5.1210e-003
tblVehicleEF	MDV	9.2200e-004	1.2940e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.03	0.09
tblVehicleEF	MDV	0.15	0.17
tblVehicleEF	MDV	0.19	0.55
tblVehicleEF	MH	0.01	0.07

tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.87	6.14
tblVehicleEF	MH	4.40	9.22
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
tblVehicleEF	MH	7.5900e-004	2.0180e-003
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tblVehicleEF	MH	0.77	1.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.58
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3900e-004	8.0700e-004
tblVehicleEF	MH	0.70	1.22
tblVehicleEF	MH	0.07	0.11
tblVehicleEF	MH	0.31	0.46
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03

tblVehicleEF	MH	0.29	0.64
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.89	6.17
tblVehicleEF	MH	4.08	8.53
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
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tblVehicleEF	MH	1.34	2.26
tblVehicleEF	MH	0.73	1.02
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
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tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77
tblVehicleEF	MH	0.07	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.25	0.55
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3300e-004	7.9500e-004
tblVehicleEF	MH	1.21	2.15
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.49	0.77

tblVehicleEF	MH	0.09	0.34
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.28	0.60
tblVehicleEF	MH	0.01	0.07
tblVehicleEF	MH	0.02	0.04
tblVehicleEF	MH	0.86	6.15
tblVehicleEF	MH	4.54	9.55
tblVehicleEF	MH	1,207.74	1,249.92
tblVehicleEF	MH	56.19	64.46
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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	8.1800e-004	2.1790e-003
tblVehicleEF	MH	3.2450e-003	3.2380e-003
tblVehicleEF	MH	0.03	0.05
tblVehicleEF	MH	7.5200e-004	2.0300e-003
tblVehicleEF	MH	0.54	0.91
tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.06	0.25
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.27	0.60
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4100e-004	8.1300e-004
tblVehicleEF	MH	0.54	0.91

tblVehicleEF	MH	0.08	0.14
tblVehicleEF	MH	0.25	0.38
tblVehicleEF	MH	0.08	0.33
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.30	0.66
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tblVehicleEF	MHD	2.9950e-003	0.02
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tblVehicleEF	MHD	0.27	1.36
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tblVehicleEF	MHD	11.30	10.90
tblVehicleEF	MHD	1.2800e-004	8.2220e-003
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tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.2300e-004	7.8670e-003
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tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.02	0.05

tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.73
tblVehicleEF	MHD	1.4160e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9900e-004	8.6500e-004
tblVehicleEF	MHD	6.1000e-004	1.8210e-003
tblVehicleEF	MHD	0.03	0.08
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	4.0300e-004	9.4500e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
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tblVehicleEF	MHD	3.0230e-003	0.02
tblVehicleEF	MHD	0.03	0.09
tblVehicleEF	MHD	0.23	0.41
tblVehicleEF	MHD	0.27	1.37
tblVehicleEF	MHD	3.61	11.15
tblVehicleEF	MHD	156.26	151.37
tblVehicleEF	MHD	1,174.80	1,226.01
tblVehicleEF	MHD	53.13	65.44
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.46	1.43
tblVehicleEF	MHD	1.22	4.18
tblVehicleEF	MHD	11.27	10.81

tblVehicleEF	MHD	1.0800e-004	6.9320e-003
tblVehicleEF	MHD	4.1220e-003	0.12
tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.0300e-004	6.6320e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.23	0.69
tblVehicleEF	MHD	1.5010e-003	1.4560e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.9400e-004	8.5100e-004
tblVehicleEF	MHD	1.0540e-003	3.3460e-003
tblVehicleEF	MHD	0.04	0.09
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	6.6800e-004	1.6820e-003
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.25	0.75
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.9790e-003	0.02
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.44	0.77

tblVehicleEF	MHD	0.27	1.35
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tblVehicleEF	MHD	1,174.80	1,226.01
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tblVehicleEF	MHD	1.5600e-004	0.01
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tblVehicleEF	MHD	7.3400e-004	1.7990e-003
tblVehicleEF	MHD	1.4900e-004	9.5720e-003
tblVehicleEF	MHD	3.9390e-003	0.12
tblVehicleEF	MHD	6.7500e-004	1.6660e-003
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.30
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.24	0.75
tblVehicleEF	MHD	1.3040e-003	1.2660e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.0100e-004	8.7300e-004
tblVehicleEF	MHD	4.4900e-004	1.3020e-003
tblVehicleEF	MHD	0.04	0.10

tblVehicleEF	MHD	0.03	0.07
tblVehicleEF	MHD	3.1800e-004	7.3400e-004
tblVehicleEF	MHD	0.05	0.35
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.27	0.82
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tblVehicleEF	OBUS	4.7130e-003	0.02
tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	1.08	2.82
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tblVehicleEF	OBUS	2.8000e-005	3.6900e-004
tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.7000e-005	3.5300e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.04

tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
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tblVehicleEF	OBUS	1.3110e-003	9.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	8.6600e-004
tblVehicleEF	OBUS	1.3190e-003	1.5570e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.1500e-004	7.5500e-004
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	1,284.15	1,343.57
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tblVehicleEF	OBUS	3.65	3.12

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tblVehicleEF	OBUS	3.1530e-003	0.01
tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
tblVehicleEF	OBUS	2.3000e-005	2.9800e-004
tblVehicleEF	OBUS	3.0000e-003	0.01
tblVehicleEF	OBUS	7.6400e-004	8.4900e-004
tblVehicleEF	OBUS	2.2450e-003	2.7250e-003
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tblVehicleEF	OBUS	7.0600e-004	8.5500e-004
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	3.4000e-005	4.4900e-004
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tblVehicleEF	OBUS	8.3100e-004	9.1600e-004
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tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
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tblVehicleEF	OBUS	0.05	0.06
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tblVehicleEF	OBUS	9.8900e-004	1.1750e-003
tblVehicleEF	OBUS	0.02	0.03

tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	5.7300e-004	6.0300e-004
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tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
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tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	1.5370e-003	3.1540e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.42	1.12
tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.07	0.17
tblVehicleEF	SBUS	6.54	7.20
tblVehicleEF	SBUS	0.77	3.26
tblVehicleEF	SBUS	6.36	17.53
tblVehicleEF	SBUS	1,199.90	1,236.25
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.88	12.40

tblVehicleEF	SBUS	2.15	5.99
tblVehicleEF	SBUS	13.58	14.02
tblVehicleEF	SBUS	2.4920e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	2.3840e-003	0.01
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	0.78	0.87
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.91
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.6500e-004	8.1000e-004
tblVehicleEF	SBUS	4.6250e-003	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	SBUS	1.13	1.26
tblVehicleEF	SBUS	2.4460e-003	5.3280e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.99

tblVehicleEF	SBUS	0.81	0.83
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.08	0.20
tblVehicleEF	SBUS	6.73	7.56
tblVehicleEF	SBUS	0.75	3.14
tblVehicleEF	SBUS	8.48	23.35
tblVehicleEF	SBUS	1,069.66	1,104.48
tblVehicleEF	SBUS	1,093.88	1,103.99
tblVehicleEF	SBUS	45.51	50.56
tblVehicleEF	SBUS	7.0800e-004	8.3900e-004
tblVehicleEF	SBUS	5.45	11.49
tblVehicleEF	SBUS	2.21	6.19
tblVehicleEF	SBUS	13.62	14.15
tblVehicleEF	SBUS	3.5960e-003	0.02
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	8.4400e-004	1.4660e-003
tblVehicleEF	SBUS	3.4410e-003	0.02
tblVehicleEF	SBUS	2.7230e-003	2.6810e-003
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	7.7600e-004	1.3480e-003
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	0.79	0.88
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.09	0.22
tblVehicleEF	SBUS	0.02	0.07

tblVehicleEF	SBUS	0.40	1.07
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.0100e-004	9.0600e-004
tblVehicleEF	SBUS	2.0510e-003	6.4570e-003
tblVehicleEF	SBUS	0.03	0.11
tblVehicleEF	SBUS	1.14	1.27
tblVehicleEF	SBUS	1.2330e-003	2.5060e-003
tblVehicleEF	SBUS	0.11	0.29
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	1.17
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	2.01	4.92
tblVehicleEF	UBUS	8.63	9.83
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.51	10.43
tblVehicleEF	UBUS	12.44	14.50
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003

tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.74
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5480e-003	1.3050e-003
tblVehicleEF	UBUS	2.9890e-003	2.8790e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	2.2400e-003	1.6910e-003
tblVehicleEF	UBUS	0.20	0.85
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.81
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	2.02	4.97
tblVehicleEF	UBUS	7.31	8.16
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.38	10.08
tblVehicleEF	UBUS	12.37	14.43
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004
tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20

tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.16	0.69
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.70	0.66
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5240e-003	1.2760e-003
tblVehicleEF	UBUS	5.1260e-003	5.0420e-003
tblVehicleEF	UBUS	0.05	0.06
tblVehicleEF	UBUS	3.4990e-003	2.7260e-003
tblVehicleEF	UBUS	0.20	0.86
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.77	0.72
tblVehicleEF	UBUS	0.02	0.11
tblVehicleEF	UBUS	0.06	0.06
tblVehicleEF	UBUS	2.01	4.90
tblVehicleEF	UBUS	9.27	10.63
tblVehicleEF	UBUS	1,944.75	2,132.88
tblVehicleEF	UBUS	138.92	112.84
tblVehicleEF	UBUS	1.0590e-003	1.3580e-003
tblVehicleEF	UBUS	3.48	10.34
tblVehicleEF	UBUS	12.48	14.53
tblVehicleEF	UBUS	0.51	0.58
tblVehicleEF	UBUS	0.06	0.21
tblVehicleEF	UBUS	1.3900e-003	8.8100e-004

tblVehicleEF	UBUS	0.22	0.25
tblVehicleEF	UBUS	0.06	0.20
tblVehicleEF	UBUS	1.2780e-003	8.1100e-004
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.16	0.68
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.81	0.78
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.5590e-003	1.3190e-003
tblVehicleEF	UBUS	2.3360e-003	2.3210e-003
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	1.7740e-003	1.3360e-003
tblVehicleEF	UBUS	0.20	0.84
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.89	0.85
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3498	3.1962	2.0093	3.2700e-003	0.2715	0.1734	0.4449	0.1199	0.1615	0.2814						300.0825
Maximum	**0.3498**	**3.1962**	**2.0093**	**3.2700e-003**	**0.2715**	**0.1734**	**0.4449**	**0.1199**	**0.1615**	**0.2814**						**300.0825**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1113	1.5584	1.9731	3.2700e-003	0.1210	0.0788	0.1998	0.0508	0.0788	0.1296						300.0822
Maximum	**0.1113**	**1.5584**	**1.9731**	**3.2700e-003**	**0.1210**	**0.0788**	**0.1998**	**0.0508**	**0.0788**	**0.1296**						**300.0822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**68.18**	**51.24**	**1.80**	**0.00**	**55.44**	**54.55**	**55.09**	**57.63**	**51.23**	**53.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2017	7-31-2017	2.0593	0.8626
2	8-1-2017	9-30-2017	0.6951	0.3733
		Highest	2.0593	0.8626

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						26.7600
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						5.9192
Water						0.0000	0.0000		0.0000	0.0000						4.9609
Total	**0.0513**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**37.6404**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Energy	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						26.7600
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						2.9596
Water						0.0000	0.0000		0.0000	0.0000						3.9687
Total	**0.0469**	**0.0123**	**0.0105**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**						**33.6887**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**8.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.50**

3.0 Construction Detail

Construction Phase

CalPoly Oppenheimer - Phase I 2030 - San Luis Obispo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2017	5/26/2017	5	20	
2	Site Preparation	Site Preparation	5/27/2017	6/9/2017	5	10	
3	Grading	Grading	6/10/2017	7/28/2017	5	35	
4	Building Construction	Building Construction	7/29/2017	12/1/2017	5	90	
5	Architectural Coating	Architectural Coating	12/2/2017	12/29/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 1.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,229; Non-Residential Outdoor: 4,743; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CalPoly Oppenheimer - Phase I 2030 - San Luis Obispo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Rubber Tired Dozers	3	8.00	247	0.40
	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	7.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004						0.0000
Off-Road	0.0410	0.4275	0.2301	3.9000e-004		0.0219	0.0219		0.0204	0.0204						35.8438
Total	**0.0410**	**0.4275**	**0.2301**	**3.9000e-004**	**4.6300e-003**	**0.0219**	**0.0266**	**7.0000e-004**	**0.0204**	**0.0211**						**35.8438**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						35.8438
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.8100e-003**	**8.6300e-003**	**0.0104**	**2.7000e-004**	**8.6300e-003**	**8.9000e-003**						**35.8438**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	8.3300e-003	1.9300e-003	2.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	8.0000e-005	1.7000e-004						1.6183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.2000e-004	8.9000e-004	7.7700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.3217
Total	**1.2100e-003**	**9.2200e-003**	**9.7000e-003**	**3.0000e-005**	**1.7900e-003**	**9.0000e-005**	**1.8800e-003**	**4.8000e-004**	**9.0000e-005**	**5.6000e-004**						**2.9400**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132						17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0903**	**0.0144**	**0.1047**	**0.0497**	**0.0132**	**0.0629**						**17.8025**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						17.8025
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0352**	**4.7300e-003**	**0.0400**	**0.0194**	**4.7300e-003**	**0.0241**						**17.8025**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	5.5000e-004	5.4000e-004	4.6600e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7930
Total	**5.5000e-004**	**5.4000e-004**	**4.6600e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7930**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629						0.0000
Off-Road	0.1006	1.1889	0.6787	1.0900e-003		0.0538	0.0538		0.0495	0.0495						101.5013
Total	**0.1006**	**1.1889**	**0.6787**	**1.0900e-003**	**0.1518**	**0.0538**	**0.2056**	**0.0629**	**0.0495**	**0.1124**						**101.5013**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0592	0.0000	0.0592	0.0246	0.0000	0.0246						0.0000
Off-Road	0.0267	0.5246	0.6426	1.0900e-003		0.0227	0.0227		0.0227	0.0227						101.5012
Total	**0.0267**	**0.5246**	**0.6426**	**1.0900e-003**	**0.0592**	**0.0227**	**0.0819**	**0.0246**	**0.0227**	**0.0473**						**101.5012**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1400e-003	2.0800e-003	0.0181	3.0000e-005	3.3700e-003	2.0000e-005	3.3900e-003	9.0000e-004	2.0000e-005	9.2000e-004						3.0841
Total	**2.1400e-003**	**2.0800e-003**	**0.0181**	**3.0000e-005**	**3.3700e-003**	**2.0000e-005**	**3.3900e-003**	**9.0000e-004**	**2.0000e-005**	**9.2000e-004**						**3.0841**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1402	1.1950	0.8182	1.2100e-003		0.0805	0.0805		0.0756	0.0756						108.8883
Total	**0.1402**	**1.1950**	**0.8182**	**1.2100e-003**		**0.0805**	**0.0805**		**0.0756**	**0.0756**						**108.8883**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.6402	0.8043	1.2100e-003		0.0407	0.0407		0.0407	0.0407						108.8882
Total	**0.0303**	**0.6402**	**0.8043**	**1.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**						**108.8882**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.8900e-003	0.0799	0.0285	1.3000e-004	2.8600e-003	8.7000e-004	3.7300e-003	8.3000e-004	8.3000e-004	1.6600e-003						12.1744
Worker	9.6300e-003	9.3700e-003	0.0816	1.5000e-004	0.0152	1.1000e-004	0.0153	4.0300e-003	1.0000e-004	4.1300e-003						13.8782
Total	**0.0135**	**0.0893**	**0.1102**	**2.8000e-004**	**0.0180**	**9.8000e-004**	**0.0190**	**4.8600e-003**	**9.3000e-004**	**5.7900e-003**						**26.0526**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003						2.5600
Total	**0.0253**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**						**2.5600**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0220					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004						2.5600
Total	**0.0226**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**						**2.5600**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004						0.6168
Total	**4.3000e-004**	**4.2000e-004**	**3.6300e-003**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**6.8000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**						**0.6168**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Non-Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						13.2759
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						13.2759
NaturalGas Mitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
NaturalGas Unmitigated	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	251189	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004						13.4841
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**1.3500e-003**	**0.0123**	**0.0103**	**7.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**						**13.4841**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				13.2759
Other Non-Asphalt Surfaces	0				0.0000
Total					**13.2759**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	79872.1				13.2759
Other Non-Asphalt Surfaces	0				0.0000
Total					**13.2759**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0456	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Unmitigated	0.0500	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.1400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0500**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.7400e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.0418					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						3.9000e-004
Total	**0.0456**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**3.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				3.9687
Unmitigated				4.9609

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	2.19456 / 0				4.9609
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**4.9609**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.75565 / 0				3.9687
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**3.9687**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				2.9596
Unmitigated				5.9192

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	11.77				5.9192
Other Non-Asphalt Surfaces	0				0.0000
Total					**5.9192**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	5.885				2.9596
Other Non-Asphalt Surfaces	0				0.0000
Total					**2.9596**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase II 2030

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	10.00	1000sqft	0.23	10,000.00	0
General Light Industry	54.51	1000sqft	9.05	54,508.00	0
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	0.07	3,000.00	0
Other Asphalt Surfaces	0.85	Acre	0.85	37,026.00	0
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	364.4	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase II 2030 - San Luis Obispo County, Annual

Project Characteristics - Phase II only.

Land Use - 54508 sf pavilion, 3000sf barn, 10000 animal care facility, 2.8 acres non-asphalt surfaces, 0.85 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 185 days, coating 45 days. Construction adjusted to reflect overall construction period of 12 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 9,121 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less.

Vehicle Trips - No increase in operational vehicle trips.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

CalPoly Oppenheimer - Phase II 2030 - San Luis Obispo County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	300.00	185.00
tblLandUse	BuildingSpaceSquareFeet	54,510.00	54,508.00
tblLandUse	LandUseSquareFeet	54,510.00	54,508.00
tblLandUse	LotAcreage	1.25	9.05
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	641.35	364.4
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2018	2030

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1602	1.6336	1.1220	2.1700e-003	0.2456	0.0763	0.3219	0.1098	0.0707	0.1805						192.6200
2021	0.3844	1.7070	1.6664	3.4300e-003	0.0884	0.0786	0.1670	0.0238	0.0741	0.0979						305.0902
Maximum	**0.3844**	**1.7070**	**1.6664**	**3.4300e-003**	**0.2456**	**0.0786**	**0.3219**	**0.1098**	**0.0741**	**0.1805**						**305.0902**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1602	1.6336	1.1220	2.1700e-003	0.1084	0.0763	0.1846	0.0462	0.0707	0.1169						192.6198
2021	0.3844	1.7070	1.6664	3.4300e-003	0.0884	0.0786	0.1670	0.0238	0.0741	0.0979						305.0899
Maximum	**0.3844**	**1.7070**	**1.6664**	**3.4300e-003**	**0.1084**	**0.0786**	**0.1846**	**0.0462**	**0.0741**	**0.1169**						**305.0899**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**41.11**	**0.00**	**28.08**	**47.62**	**0.00**	**22.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	1.4938	1.4938
2	12-1-2020	2-28-2021	0.7880	0.7880
3	3-1-2021	5-31-2021	0.7768	0.7768
4	6-1-2021	8-31-2021	0.6714	0.6714
5	9-1-2021	9-30-2021	0.1105	0.1105
		Highest	1.4938	1.4938

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3243	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Energy	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						195.1063
Mobile	0.1017	0.4254	1.1612	4.6200e-003	0.5466	3.3300e-003	0.5500	0.1461	3.1100e-003	0.1492						424.9930
Waste						0.0000	0.0000		0.0000	0.0000						89.7227
Water						0.0000	0.0000		0.0000	0.0000						33.0229
Total	**0.4347**	**0.5047**	**1.2290**	**5.1000e-003**	**0.5466**	**9.3600e-003**	**0.5560**	**0.1461**	**9.1400e-003**	**0.1553**						**742.8473**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2930	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Energy	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						195.1063
Mobile	0.1017	0.4254	1.1612	4.6200e-003	0.5466	3.3300e-003	0.5500	0.1461	3.1100e-003	0.1492						424.9930
Waste						0.0000	0.0000		0.0000	0.0000						44.8613
Water						0.0000	0.0000		0.0000	0.0000						26.4376
Total	**0.4034**	**0.5047**	**1.2290**	**5.1000e-003**	**0.5466**	**9.3600e-003**	**0.5560**	**0.1461**	**9.1400e-003**	**0.1553**						**691.4007**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.93**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	8/9/2021	5	185	
5	Architectural Coating	Architectural Coating	8/10/2021	10/11/2021	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 3.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,262; Non-Residential Outdoor: 33,754; Striped Parking Area: 9,540 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	41.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	94.00	37.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**4.6300e-003**	**0.0166**	**0.0212**	**7.0000e-004**	**0.0154**	**0.0161**						**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	6.5900e-003	1.4300e-003	2.0000e-005	3.5000e-004	3.0000e-005	3.8000e-004	1.0000e-004	3.0000e-005	1.2000e-004						1.5792
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**8.4000e-004**	**7.1900e-003**	**6.5900e-003**	**3.0000e-005**	**1.7900e-003**	**4.0000e-005**	**1.8300e-003**	**4.8000e-004**	**4.0000e-005**	**5.1000e-004**						**2.7883**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2385
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**1.8100e-003**	**0.0166**	**0.0184**	**2.7000e-004**	**0.0154**	**0.0157**						**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	6.5900e-003	1.4300e-003	2.0000e-005	3.5000e-004	3.0000e-005	3.8000e-004	1.0000e-004	3.0000e-005	1.2000e-004						1.5792
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**8.4000e-004**	**7.1900e-003**	**6.5900e-003**	**3.0000e-005**	**1.7900e-003**	**4.0000e-005**	**1.8300e-003**	**4.8000e-004**	**4.0000e-005**	**5.1000e-004**						**2.7883**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**						**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0352**	**0.0110**	**0.0462**	**0.0194**	**0.0101**	**0.0295**						**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3872
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.1301**	**0.0326**	**0.1627**	**0.0540**	**0.0300**	**0.0840**						**82.3872**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3871
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.0507**	**0.0326**	**0.0834**	**0.0210**	**0.0300**	**0.0510**						**82.3871**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6232
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6232**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.9300e-003	0.0539	0.0163	1.0000e-004	2.3500e-003	2.9000e-004	2.6500e-003	6.8000e-004	2.8000e-004	9.6000e-004						9.9807
Worker	5.7600e-003	5.2300e-003	0.0453	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4400e-003						10.6079
Total	**7.6900e-003**	**0.0592**	**0.0616**	**2.2000e-004**	**0.0150**	**3.7000e-004**	**0.0154**	**4.0500e-003**	**3.6000e-004**	**4.4000e-003**						**20.5886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6231
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6231**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	1.9300e-003	0.0539	0.0163	1.0000e-004	2.3500e-003	2.9000e-004	2.6500e-003	6.8000e-004	2.8000e-004	9.6000e-004						9.9807
Worker	5.7600e-003	5.2300e-003	0.0453	1.2000e-004	0.0127	8.0000e-005	0.0128	3.3700e-003	8.0000e-005	3.4400e-003						10.6079
Total	**7.6900e-003**	**0.0592**	**0.0616**	**2.2000e-004**	**0.0150**	**3.7000e-004**	**0.0154**	**4.0500e-003**	**3.6000e-004**	**4.4000e-003**						**20.5886**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1492	1.3684	1.3012	2.1100e-003		0.0753	0.0753		0.0708	0.0708						182.9320
Total	**0.1492**	**1.3684**	**1.3012**	**2.1100e-003**		**0.0753**	**0.0753**		**0.0708**	**0.0708**						**182.9320**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	8.8500e-003	0.2765	0.0810	5.7000e-004	0.0132	7.9000e-004	0.0140	3.8100e-003	7.5000e-004	4.5700e-003						55.6262
Worker	0.0301	0.0262	0.2300	6.4000e-004	0.0710	4.5000e-004	0.0715	0.0189	4.2000e-004	0.0193						57.4490
Total	**0.0389**	**0.3027**	**0.3111**	**1.2100e-003**	**0.0842**	**1.2400e-003**	**0.0855**	**0.0227**	**1.1700e-003**	**0.0239**						**113.0752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1492	1.3684	1.3012	2.1100e-003		0.0753	0.0753		0.0708	0.0708						182.9318
Total	**0.1492**	**1.3684**	**1.3012**	**2.1100e-003**		**0.0753**	**0.0753**		**0.0708**	**0.0708**						**182.9318**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	8.8500e-003	0.2765	0.0810	5.7000e-004	0.0132	7.9000e-004	0.0140	3.8100e-003	7.5000e-004	4.5700e-003						55.6262
Worker	0.0301	0.0262	0.2300	6.4000e-004	0.0710	4.5000e-004	0.0715	0.0189	4.2000e-004	0.0193						57.4490
Total	**0.0389**	**0.3027**	**0.3111**	**1.2100e-003**	**0.0842**	**1.2400e-003**	**0.0855**	**0.0227**	**1.1700e-003**	**0.0239**						**113.0752**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003						5.7547
Total	**0.1945**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**						**5.7547**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.7400e-003	1.5200e-003	0.0133	4.0000e-005	4.1200e-003	3.0000e-005	4.1400e-003	1.0900e-003	2.0000e-005	1.1200e-003						3.3283
Total	**1.7400e-003**	**1.5200e-003**	**0.0133**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**2.0000e-005**	**1.1200e-003**						**3.3283**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.9300e-003	0.0344	0.0409	7.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003						5.7547
Total	**0.1945**	**0.0344**	**0.0409**	**7.0000e-005**		**2.1200e-003**	**2.1200e-003**		**2.1200e-003**	**2.1200e-003**						**5.7547**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.7400e-003	1.5200e-003	0.0133	4.0000e-005	4.1200e-003	3.0000e-005	4.1400e-003	1.0900e-003	2.0000e-005	1.1200e-003						3.3283
Total	**1.7400e-003**	**1.5200e-003**	**0.0133**	**4.0000e-005**	**4.1200e-003**	**3.0000e-005**	**4.1400e-003**	**1.0900e-003**	**2.0000e-005**	**1.1200e-003**						**3.3283**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1017	0.4254	1.1612	4.6200e-003	0.5466	3.3300e-003	0.5500	0.1461	3.1100e-003	0.1492						424.9930
Unmitigated	0.1017	0.4254	1.1612	4.6200e-003	0.5466	3.3300e-003	0.5500	0.1461	3.1100e-003	0.1492						424.9930

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	379.93	71.95	37.07	947,056	947,056
Medical Office Building	361.30	89.60	15.50	495,366	495,366
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	5.04	5.04	5.04	16,634	16,634
Total	746.27	166.59	57.61	1,459,056	1,459,056

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Medical Office Building	13.00	5.00	5.00	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	13.00	5.00	5.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
General Light Industry	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Unrefrigerated Warehouse-No Rail	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Non-Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						108.2322
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						108.2322
NaturalGas Mitigated	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						86.8741
NaturalGas Unmitigated	8.7300e-003	0.0793	0.0666	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003						86.8741

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.44337e+006	7.7800e-003	0.0708	0.0594	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003						77.4815
Medical Office Building	164500	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.8305
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	10470	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5620
Total		**8.7300e-003**	**0.0793**	**0.0666**	**4.7000e-004**		**6.0300e-003**	**6.0300e-003**		**6.0300e-003**	**6.0300e-003**						**86.8741**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.44337e+006	7.7800e-003	0.0708	0.0594	4.2000e-004		5.3800e-003	5.3800e-003		5.3800e-003	5.3800e-003						77.4815
Medical Office Building	164500	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.8305
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Unrefrigerated Warehouse-No Rail	10470	6.0000e-005	5.1000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5620
Total		**8.7300e-003**	**0.0793**	**0.0666**	**4.7000e-004**		**6.0300e-003**	**6.0300e-003**		**6.0300e-003**	**6.0300e-003**						**86.8741**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	458957				76.1921
Medical Office Building	182200				30.2472
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	10800				1.7929
Total					**108.2322**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	458957				76.1921
Medical Office Building	182200				30.2472
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	10800				1.7929
Total					**108.2322**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2930	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Unmitigated	0.3243	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0503					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2739					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Total	**0.3243**	**1.0000e-005**	**1.1900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.4800e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0190					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2739					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.4800e-003
Total	**0.2930**	**1.0000e-005**	**1.1900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.4800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				26.4376
Unmitigated				33.0229

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	12.6054 / 0				28.4813
Medical Office Building	1.25481 / 0.239011				2.9740
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Unrefrigerated Warehouse-No Rail	0.69375 / 0				1.5675
Total					**33.0229**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	10.0844 / 0				22.7851
Medical Office Building	1.00384 / 0.224431				2.3985
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Unrefrigerated Warehouse-No Rail	0.555 / 0				1.2540
Total					**26.4376**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				44.8613
Unmitigated				89.7227

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	67.59				33.9911
Medical Office Building	108				54.3134
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	2.82				1.4182
Total					**89.7227**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	33.795				16.9956
Medical Office Building	54				27.1567
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Unrefrigerated Warehouse-No Rail	1.41				0.7091
Total					**44.8613**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase III 2030

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	88.15	1000sqft	7.00	88,150.00	0
Other Non-Asphalt Surfaces	3.70	Acre	3.70	161,172.00	0
Other Asphalt Surfaces	0.33	Acre	0.33	14,374.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	364.4	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

CalPoly Oppenheimer - Phase III 2030 - San Luis Obispo County, Annual

Project Characteristics - Phase III only.

Land Use - 88150 sf event center, 2.8 acres non-asphalt surfaces, 0.33 ac paved

Construction Phase - Based on model defaults. Demo 20 days, site prep 10 days, grading 30 days, construction 420 days, coating 60 days. Construction adjusted to reflect overall construction period of 24 months.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating - Includes use of low-VOC content architectural paint having a VOC content of 50 g/L, or less. Parking coating based on model default.

Vehicle Trips - Trip gen 13.613. Operational trips only projected to occur 30 days/year. Refer to separate spreadsheet for adjusted calculation of annual mobile-source emissions.

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	300.00	420.00
tblConstructionPhase	PhaseEndDate	10/11/2021	9/26/2022
tblConstructionPhase	PhaseEndDate	8/9/2021	7/4/2022
tblConstructionPhase	PhaseStartDate	8/10/2021	7/5/2022
tblLandUse	LotAcreage	2.02	7.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016

tblProjectCharacteristics	CO2IntensityFactor	641.35	364.4
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	13.61

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1615	1.6416	1.1325	2.2000e-003	0.2470	0.0763	0.3233	0.1103	0.0707	0.1810						195.7718
2021	0.3242	2.8605	2.7712	5.8700e-003	0.1650	0.1275	0.2925	0.0444	0.1199	0.1643						524.3563
2022	0.3971	1.3452	1.4252	3.0600e-003	0.0892	0.0566	0.1457	0.0240	0.0534	0.0774						273.4669
Maximum	**0.3971**	**2.8605**	**2.7712**	**5.8700e-003**	**0.2470**	**0.1275**	**0.3233**	**0.1103**	**0.1199**	**0.1810**						**524.3563**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0577	1.0033	1.2547	2.2000e-003	0.1105	0.0460	0.1565	0.0468	0.0460	0.0928						195.7716
2021	0.1641	2.4421	2.9406	5.8700e-003	0.1650	0.1203	0.2853	0.0444	0.1202	0.1646						524.3559
2022	0.3251	1.2526	1.5247	3.0600e-003	0.0892	0.0632	0.1523	0.0240	0.0631	0.0871						273.4667
Maximum	**0.3251**	**2.4421**	**2.9406**	**5.8700e-003**	**0.1650**	**0.1203**	**0.2853**	**0.0468**	**0.1202**	**0.1646**						**524.3559**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**38.05**	**19.66**	**-7.34**	**0.00**	**27.25**	**11.88**	**21.99**	**35.53**	**6.03**	**18.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2020**	**11-30-2020**	1.4942	0.8257
2	**12-1-2020**	**2-28-2021**	0.8120	0.6477
3	**3-1-2021**	**5-31-2021**	0.8001	0.6545
4	**6-1-2021**	**8-31-2021**	0.7991	0.6535
5	**9-1-2021**	**11-30-2021**	0.7925	0.6484
6	**12-1-2021**	**2-28-2022**	0.7364	0.6363
7	**3-1-2022**	**5-31-2022**	0.7250	0.6454
8	**6-1-2022**	**8-31-2022**	0.4704	0.4369
9	**9-1-2022**	**9-30-2022**	0.0909	0.0891
		Highest	1.4942	0.8257

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4207	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003
Energy	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						248.5200
Mobile	0.1689	0.7373	2.1304	8.8200e-003	1.0598	6.2700e-003	1.0661	0.2833	5.8400e-003	0.2892						812.2963
Waste						0.0000	0.0000		0.0000	0.0000						54.9722
Water						0.0000	0.0000		0.0000	0.0000						46.0581
Total	**0.6022**	**0.8518**	**2.2281**	**9.5100e-003**	**1.0598**	**0.0150**	**1.0748**	**0.2833**	**0.0146**	**0.2979**						**1,161.8498**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3799	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003
Energy	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						248.5200
Mobile	0.1689	0.7373	2.1304	8.8200e-003	1.0598	6.2700e-003	1.0661	0.2833	5.8400e-003	0.2892						812.2963
Waste						0.0000	0.0000		0.0000	0.0000						27.4861
Water						0.0000	0.0000		0.0000	0.0000						36.8465
Total	**0.5613**	**0.8518**	**2.2281**	**9.5100e-003**	**1.0598**	**0.0150**	**1.0748**	**0.2833**	**0.0146**	**0.2979**						**1,125.1521**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.16**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2020	9/28/2020	5	20	
2	Site Preparation	Site Preparation	9/29/2020	10/12/2020	5	10	
3	Grading	Grading	10/13/2020	11/23/2020	5	30	
4	Building Construction	Building Construction	11/24/2020	7/4/2022	5	420	
5	Architectural Coating	Architectural Coating	7/5/2022	9/26/2022	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 132,225; Non-Residential Outdoor: 44,075; Striped Parking Area: 10,533 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Scrapers	2	8.00	367	0.48
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	22.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	111.00	43.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	31.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4200e-003	0.0000	3.4200e-003	5.2000e-004	0.0000	5.2000e-004						0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154						34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**3.4200e-003**	**0.0166**	**0.0200**	**5.2000e-004**	**0.0154**	**0.0159**						**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9900e-003	1.0800e-003	1.0000e-005	2.6000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005						1.1940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**7.9000e-004**	**5.5900e-003**	**6.2400e-003**	**2.0000e-005**	**1.7000e-003**	**3.0000e-005**	**1.7400e-003**	**4.5000e-004**	**3.0000e-005**	**4.8000e-004**						**2.4031**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3300e-003	0.0000	1.3300e-003	2.0000e-004	0.0000	2.0000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						34.2385
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.3300e-003**	**8.6300e-003**	**9.9600e-003**	**2.0000e-004**	**8.6300e-003**	**8.8300e-003**						**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9900e-003	1.0800e-003	1.0000e-005	2.6000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005						1.1940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.6000e-004	6.0000e-004	5.1600e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.2091
Total	**7.9000e-004**	**5.5900e-003**	**6.2400e-003**	**2.0000e-005**	**1.7000e-003**	**3.0000e-005**	**1.7400e-003**	**4.5000e-004**	**3.0000e-005**	**4.8000e-004**						**2.4031**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497						0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101						16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**						**16.8505**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						16.8505
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0352**	**4.7300e-003**	**0.0400**	**0.0194**	**4.7300e-003**	**0.0241**						**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.9000e-004	3.6000e-004	3.1000e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004						0.7255
Total	**3.9000e-004**	**3.6000e-004**	**3.1000e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**						**0.7255**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540						0.0000
Off-Road	0.0668	0.7530	0.4794	9.3000e-004		0.0326	0.0326		0.0300	0.0300						82.3872
Total	**0.0668**	**0.7530**	**0.4794**	**9.3000e-004**	**0.1301**	**0.0326**	**0.1627**	**0.0540**	**0.0300**	**0.0840**						**82.3872**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210						0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195						82.3871
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0507**	**0.0195**	**0.0702**	**0.0210**	**0.0195**	**0.0405**						**82.3871**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.3100e-003	1.1900e-003	0.0103	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004						2.4182
Total	**1.3100e-003**	**1.1900e-003**	**0.0103**	**3.0000e-005**	**2.8900e-003**	**2.0000e-005**	**2.9100e-003**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**						**2.4182**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0297	0.2686	0.2359	3.8000e-004		0.0156	0.0156		0.0147	0.0147						32.6232
Total	**0.0297**	**0.2686**	**0.2359**	**3.8000e-004**		**0.0156**	**0.0156**		**0.0147**	**0.0147**						**32.6232**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.2400e-003	0.0627	0.0190	1.2000e-004	2.7300e-003	3.4000e-004	3.0800e-003	7.9000e-004	3.3000e-004	1.1200e-003						11.5992
Worker	6.8000e-003	6.1700e-003	0.0535	1.4000e-004	0.0150	1.0000e-004	0.0151	3.9800e-003	9.0000e-005	4.0700e-003						12.5263
Total	**9.0400e-003**	**0.0688**	**0.0724**	**2.6000e-004**	**0.0177**	**4.4000e-004**	**0.0181**	**4.7700e-003**	**4.2000e-004**	**5.1900e-003**						**24.1255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.4300e-003	0.1992	0.2502	3.8000e-004		0.0127	0.0127		0.0127	0.0127						32.6231
Total	**9.4300e-003**	**0.1992**	**0.2502**	**3.8000e-004**		**0.0127**	**0.0127**		**0.0127**	**0.0127**						**32.6231**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	2.2400e-003	0.0627	0.0190	1.2000e-004	2.7300e-003	3.4000e-004	3.0800e-003	7.9000e-004	3.3000e-004	1.1200e-003						11.5992
Worker	6.8000e-003	6.1700e-003	0.0535	1.4000e-004	0.0150	1.0000e-004	0.0151	3.9800e-003	9.0000e-005	4.0700e-003						12.5263
Total	**9.0400e-003**	**0.0688**	**0.0724**	**2.6000e-004**	**0.0177**	**4.4000e-004**	**0.0181**	**4.7700e-003**	**4.2000e-004**	**5.1900e-003**						**24.1255**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176						304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**						**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0171	0.5342	0.1565	1.1100e-003	0.0255	1.5200e-003	0.0270	7.3700e-003	1.4600e-003	8.8300e-003						107.4699
Worker	0.0590	0.0515	0.4516	1.2500e-003	0.1395	8.9000e-004	0.1403	0.0371	8.2000e-004	0.0379						112.7765
Total	**0.0762**	**0.5856**	**0.6081**	**2.3600e-003**	**0.1649**	**2.4100e-003**	**0.1674**	**0.0444**	**2.2800e-003**	**0.0467**						**220.2464**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0879	1.8565	2.3325	3.5100e-003		0.1179	0.1179		0.1179	0.1179						304.1095
Total	**0.0879**	**1.8565**	**2.3325**	**3.5100e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**						**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0171	0.5342	0.1565	1.1100e-003	0.0255	1.5200e-003	0.0270	7.3700e-003	1.4600e-003	8.8300e-003						107.4699
Worker	0.0590	0.0515	0.4516	1.2500e-003	0.1395	8.9000e-004	0.1403	0.0371	8.2000e-004	0.0379						112.7765
Total	**0.0762**	**0.5856**	**0.6081**	**2.3600e-003**	**0.1649**	**2.4100e-003**	**0.1674**	**0.0444**	**2.2800e-003**	**0.0467**						**220.2464**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1118	1.0228	1.0718	1.7600e-003		0.0530	0.0530		0.0499	0.0499						152.6891
Total	**0.1118**	**1.0228**	**1.0718**	**1.7600e-003**		**0.0530**	**0.0530**		**0.0499**	**0.0499**						**152.6891**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	7.9400e-003	0.2548	0.0725	5.5000e-004	0.0128	6.7000e-004	0.0135	3.7000e-003	6.4000e-004	4.3400e-003						53.5729
Worker	0.0278	0.0232	0.2076	6.0000e-004	0.0700	4.3000e-004	0.0704	0.0186	4.0000e-004	0.0190						54.5781
Total	**0.0358**	**0.2780**	**0.2802**	**1.1500e-003**	**0.0828**	**1.1000e-003**	**0.0839**	**0.0223**	**1.0400e-003**	**0.0233**						**108.1511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0441	0.9318	1.1707	1.7600e-003		0.0592	0.0592		0.0592	0.0592						152.6889
Total	**0.0441**	**0.9318**	**1.1707**	**1.7600e-003**		**0.0592**	**0.0592**		**0.0592**	**0.0592**						**152.6889**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	7.9400e-003	0.2548	0.0725	5.5000e-004	0.0128	6.7000e-004	0.0135	3.7000e-003	6.4000e-004	4.3400e-003						53.5729
Worker	0.0278	0.0232	0.2076	6.0000e-004	0.0700	4.3000e-004	0.0704	0.0186	4.0000e-004	0.0190						54.5781
Total	**0.0358**	**0.2780**	**0.2802**	**1.1500e-003**	**0.0828**	**1.1000e-003**	**0.0839**	**0.0223**	**1.0400e-003**	**0.0233**						**108.1511**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2409					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	6.1400e-003	0.0423	0.0544	9.0000e-005		2.4500e-003	2.4500e-003		2.4500e-003	2.4500e-003						7.6722
Total	**0.2470**	**0.0423**	**0.0544**	**9.0000e-005**		**2.4500e-003**	**2.4500e-003**		**2.4500e-003**	**2.4500e-003**						**7.6722**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.5300e-003	2.1100e-003	0.0189	5.0000e-005	6.3500e-003	4.0000e-005	6.3900e-003	1.6900e-003	4.0000e-005	1.7200e-003						4.9545
Total	**2.5300e-003**	**2.1100e-003**	**0.0189**	**5.0000e-005**	**6.3500e-003**	**4.0000e-005**	**6.3900e-003**	**1.6900e-003**	**4.0000e-005**	**1.7200e-003**						**4.9545**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2409					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.7800e-003	0.0407	0.0550	9.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003						7.6722
Total	**0.2427**	**0.0407**	**0.0550**	**9.0000e-005**		**2.8500e-003**	**2.8500e-003**		**2.8500e-003**	**2.8500e-003**						**7.6722**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.5300e-003	2.1100e-003	0.0189	5.0000e-005	6.3500e-003	4.0000e-005	6.3900e-003	1.6900e-003	4.0000e-005	1.7200e-003						4.9545
Total	**2.5300e-003**	**2.1100e-003**	**0.0189**	**5.0000e-005**	**6.3500e-003**	**4.0000e-005**	**6.3900e-003**	**1.6900e-003**	**4.0000e-005**	**1.7200e-003**						**4.9545**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1689	0.7373	2.1304	8.8200e-003	1.0598	6.2700e-003	1.0661	0.2833	5.8400e-003	0.2892						812.2963
Unmitigated	0.1689	0.7373	2.1304	8.8200e-003	1.0598	6.2700e-003	1.0661	0.2833	5.8400e-003	0.2892						812.2963

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,199.99	0.00	0.00	2,828,840	2,828,840
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	1,199.99	0.00	0.00	2,828,840	2,828,840

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Non-Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						123.2173
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						123.2173
NaturalGas Mitigated	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
NaturalGas Unmitigated	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.33421e+006	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0126**	**0.1144**	**0.0961**	**6.9000e-004**		**8.7000e-003**	**8.7000e-003**		**8.7000e-003**	**8.7000e-003**						**125.3027**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	2.33421e+006	0.0126	0.1144	0.0961	6.9000e-004		8.7000e-003	8.7000e-003		8.7000e-003	8.7000e-003						125.3027
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Total		**0.0126**	**0.1144**	**0.0961**	**6.9000e-004**		**8.7000e-003**	**8.7000e-003**		**8.7000e-003**	**8.7000e-003**						**125.3027**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	742223				123.2173
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**123.2173**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	742223				123.2173
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**123.2173**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3799	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003
Unmitigated	0.4207	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0650					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.3556					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003
Total	**0.4207**	**1.0000e-005**	**1.5500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						**3.2100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0241					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.3556					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						3.2100e-003
Total	**0.3799**	**1.0000e-005**	**1.5500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						**3.2100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				36.8465
Unmitigated				46.0581

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	20.3847 / 0				46.0581
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**46.0581**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	16.3077 / 0				36.8465
Other Asphalt Surfaces	0 / 0				0.0000
Other Non-Asphalt Surfaces	0 / 0				0.0000
Total					**36.8465**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				27.4861
Unmitigated				54.9722

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	109.31				54.9722
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**54.9722**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	54.655				27.4861
Other Asphalt Surfaces	0				0.0000
Other Non-Asphalt Surfaces	0				0.0000
Total					**27.4861**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly Oppenheimer - Phase IV 2030

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	60.00	1000sqft	1.38	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	364.4	**CH4 Intensity (lb/MWhr)**	0.016	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase IV only.

Land Use - 60000 sf greenhouse,

Construction Phase - Based on model defaults. site prep 2 days, grading 4 days, construction 550 days. Arch coating for greenhouse considered minimal.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults. Soil balanced on site.

Demolition - 6731 sf demolished

Grading - Fugitive dust based on model defaults.

Architectural Coating -

Vehicle Trips - No increase in mobile trips

Area Coating - .

Energy Use - Energy use, water use/conveyance, solid waste generation based on model defaults.

Construction Off-road Equipment Mitigation - Includes 50% CE/15mph speed limit for off-road vehicle travel, watering exposed surfaces 3x daily, T3 offroad equipment.

Area Mitigation - Includes low-VOC content paint (50 g/L max)

Water Mitigation - Includes use of low-flow water fixtures and water-efficient irrigation systems.

Waste Mitigation - Includes 50% diversion rate per state waste diversion targets.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	550.00
tblConstructionPhase	PhaseEndDate	3/2/2020	8/31/2020
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.016
tblProjectCharacteristics	CO2IntensityFactor	641.35	364.4
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1922	1.4391	1.0343	1.8300e-003	0.1207	0.0783	0.1990	0.0575	0.0748	0.1323						158.7106
2019	0.3183	2.2490	1.9343	3.4400e-003	0.0373	0.1209	0.1583	0.0101	0.1168	0.1268						292.3793
2020	0.1894	1.3858	1.2496	2.2900e-003	0.0249	0.0699	0.0948	6.7100e-003	0.0675	0.0742						192.9697
Maximum	**0.3183**	**2.2490**	**1.9343**	**3.4400e-003**	**0.1207**	**0.1209**	**0.1990**	**0.0575**	**0.1168**	**0.1323**						**292.3793**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0558	0.9172	1.0400	1.8300e-003	0.0581	0.0493	0.1074	0.0254	0.0493	0.0747						158.7104
2019	0.1054	1.7396	1.9332	3.4400e-003	0.0373	0.0969	0.1342	0.0101	0.0968	0.1069						292.3790
2020	0.0685	1.1499	1.2749	2.2900e-003	0.0249	0.0643	0.0892	6.7100e-003	0.0642	0.0710						192.9695
Maximum	**0.1054**	**1.7396**	**1.9332**	**3.4400e-003**	**0.0581**	**0.0969**	**0.1342**	**0.0254**	**0.0968**	**0.1069**						**292.3790**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**67.18**	**24.97**	**-0.71**	**0.00**	**34.25**	**21.78**	**26.83**	**43.24**	**18.80**	**24.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2018**	**7-31-2018**	0.4542	0.1950
2	**8-1-2018**	**10-31-2018**	0.7070	0.4670
3	**11-1-2018**	**1-31-2019**	0.6871	0.4667
4	**2-1-2019**	**4-30-2019**	0.6251	0.4491
5	**5-1-2019**	**7-31-2019**	0.6455	0.4637
6	**8-1-2019**	**10-31-2019**	0.6458	0.4640
7	**11-1-2019**	**1-31-2020**	0.6291	0.4631
8	**2-1-2020**	**4-30-2020**	0.5818	0.4499
9	**5-1-2020**	**7-31-2020**	0.5942	0.4594
10	**8-1-2020**	**9-30-2020**	0.2002	0.1548
		Highest	0.7070	0.4670

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2761	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003
Energy	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						169.1571
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						37.4159
Water						0.0000	0.0000		0.0000	0.0000						31.3498
Total	**0.2847**	**0.0779**	**0.0664**	**4.7000e-004**	**0.0000**	**5.9200e-003**	**5.9200e-003**	**0.0000**	**5.9200e-003**	**5.9200e-003**						**237.9249**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2483	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003
Energy	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						169.1571
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Waste						0.0000	0.0000		0.0000	0.0000						18.7079
Water						0.0000	0.0000		0.0000	0.0000						25.0799
Total	**0.2569**	**0.0779**	**0.0664**	**4.7000e-004**	**0.0000**	**5.9200e-003**	**5.9200e-003**	**0.0000**	**5.9200e-003**	**5.9200e-003**						**212.9470**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**9.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.50**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/29/2018	6/11/2018	5	2	
2	Grading	Grading	6/12/2018	7/23/2018	5	4	
3	Building Construction	Building Construction	7/24/2018	8/31/2020	5	550	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0290	0.0000	0.0290	0.0148	0.0000	0.0148						0.0000
Off-Road	9.0300e-003	0.1037	0.0404	9.0000e-005		4.7600e-003	4.7600e-003		4.3800e-003	4.3800e-003						7.9327
Total	**9.0300e-003**	**0.1037**	**0.0404**	**9.0000e-005**	**0.0290**	**4.7600e-003**	**0.0338**	**0.0148**	**4.3800e-003**	**0.0192**						**7.9327**

3.2 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e-004	2.1000e-004	1.7800e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004						0.3429
Total	**2.1000e-004**	**2.1000e-004**	**1.7800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3429**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	5.7600e-003	0.0000	5.7600e-003						0.0000
Off-Road	2.1100e-003	0.0420	0.0491	9.0000e-005		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003						7.9327
Total	**2.1100e-003**	**0.0420**	**0.0491**	**9.0000e-005**	**0.0113**	**1.8700e-003**	**0.0132**	**5.7600e-003**	**1.8700e-003**	**7.6300e-003**						**7.9327**

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.1000e-004	2.1000e-004	1.7800e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004						0.3429
Total	**2.1000e-004**	**2.1000e-004**	**1.7800e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**3.9000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3429**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0737	0.0000	0.0737	0.0379	0.0000	0.0379						0.0000
Off-Road	0.0225	0.2560	0.1015	2.1000e-004		0.0119	0.0119		0.0110	0.0110						19.4907
Total	**0.0225**	**0.2560**	**0.1015**	**2.1000e-004**	**0.0737**	**0.0119**	**0.0856**	**0.0379**	**0.0110**	**0.0489**						**19.4907**

3.3 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.4000e-004	6.2000e-004	5.3500e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004						1.0286
Total	**6.4000e-004**	**6.2000e-004**	**5.3500e-003**	**1.0000e-005**	**1.1600e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**						**1.0286**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0288	0.0000	0.0288	0.0148	0.0000	0.0148						0.0000
Off-Road	5.1700e-003	0.1035	0.1213	2.1000e-004		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003						19.4907
Total	**5.1700e-003**	**0.1035**	**0.1213**	**2.1000e-004**	**0.0288**	**4.6600e-003**	**0.0334**	**0.0148**	**4.6600e-003**	**0.0194**						**19.4907**

3.3 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	6.4000e-004	6.2000e-004	5.3500e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004						1.0286
Total	**6.4000e-004**	**6.2000e-004**	**5.3500e-003**	**1.0000e-005**	**1.1600e-003**	**1.0000e-005**	**1.1600e-003**	**3.1000e-004**	**1.0000e-005**	**3.1000e-004**						**1.0286**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1490	1.0021	0.7979	1.2700e-003		0.0608	0.0608		0.0587	0.0587						106.4680
Total	**0.1490**	**1.0021**	**0.7979**	**1.2700e-003**		**0.0608**	**0.0608**		**0.0587**	**0.0587**						**106.4680**

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.0900e-003	0.0690	0.0233	1.2000e-004	2.6100e-003	6.4000e-004	3.2500e-003	7.5000e-004	6.1000e-004	1.3700e-003						11.1257
Worker	7.6900e-003	7.4100e-003	0.0641	1.4000e-004	0.0138	1.0000e-004	0.0139	3.6800e-003	9.0000e-005	3.7700e-003						12.3220
Total	**0.0108**	**0.0764**	**0.0874**	**2.6000e-004**	**0.0165**	**7.4000e-004**	**0.0172**	**4.4300e-003**	**7.0000e-004**	**5.1400e-003**						**23.4476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0368	0.6944	0.7750	1.2700e-003		0.0421	0.0421		0.0421	0.0421						106.4679
Total	**0.0368**	**0.6944**	**0.7750**	**1.2700e-003**		**0.0421**	**0.0421**		**0.0421**	**0.0421**						**106.4679**

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.0900e-003	0.0690	0.0233	1.2000e-004	2.6100e-003	6.4000e-004	3.2500e-003	7.5000e-004	6.1000e-004	1.3700e-003						11.1257
Worker	7.6900e-003	7.4100e-003	0.0641	1.4000e-004	0.0138	1.0000e-004	0.0139	3.6800e-003	9.0000e-005	3.7700e-003						12.3220
Total	**0.0108**	**0.0764**	**0.0874**	**2.6000e-004**	**0.0165**	**7.4000e-004**	**0.0172**	**4.4300e-003**	**7.0000e-004**	**5.1400e-003**						**23.4476**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2965	2.0854	1.7601	2.8800e-003		0.1195	0.1195		0.1154	0.1154						240.0570
Total	**0.2965**	**2.0854**	**1.7601**	**2.8800e-003**		**0.1195**	**0.1195**		**0.1154**	**0.1154**						**240.0570**

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.1100e-003	0.1489	0.0467	2.6000e-004	5.9300e-003	1.1900e-003	7.1200e-003	1.7100e-003	1.1400e-003	2.8500e-003						25.1815
Worker	0.0157	0.0147	0.1275	3.0000e-004	0.0314	2.1000e-004	0.0316	8.3500e-003	2.0000e-004	8.5400e-003						27.1408
Total	**0.0218**	**0.1636**	**0.1742**	**5.6000e-004**	**0.0373**	**1.4000e-003**	**0.0387**	**0.0101**	**1.3400e-003**	**0.0114**						**52.3222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0836	1.5760	1.7590	2.8800e-003		0.0955	0.0955		0.0955	0.0955						240.0568
Total	**0.0836**	**1.5760**	**1.7590**	**2.8800e-003**		**0.0955**	**0.0955**		**0.0955**	**0.0955**						**240.0568**

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.1100e-003	0.1489	0.0467	2.6000e-004	5.9300e-003	1.1900e-003	7.1200e-003	1.7100e-003	1.1400e-003	2.8500e-003						25.1815
Worker	0.0157	0.0147	0.1275	3.0000e-004	0.0314	2.1000e-004	0.0316	8.3500e-003	2.0000e-004	8.5400e-003						27.1408
Total	**0.0218**	**0.1636**	**0.1742**	**5.6000e-004**	**0.0373**	**1.4000e-003**	**0.0387**	**0.0101**	**1.3400e-003**	**0.0114**						**52.3222**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1767	1.2866	1.1474	1.9200e-003		0.0693	0.0693		0.0669	0.0669						158.6747
Total	**0.1767**	**1.2866**	**1.1474**	**1.9200e-003**		**0.0693**	**0.0693**		**0.0669**	**0.0669**						**158.6747**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.2400e-003	0.0906	0.0274	1.7000e-004	3.9500e-003	4.9000e-004	4.4500e-003	1.1400e-003	4.7000e-004	1.6100e-003						16.7630
Worker	9.5100e-003	8.6400e-003	0.0748	1.9000e-004	0.0209	1.4000e-004	0.0211	5.5600e-003	1.3000e-004	5.6900e-003						17.5320
Total	**0.0128**	**0.0992**	**0.1023**	**3.6000e-004**	**0.0249**	**6.3000e-004**	**0.0255**	**6.7000e-003**	**6.0000e-004**	**7.3000e-003**						**34.2950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0557	1.0507	1.1726	1.9200e-003		0.0636	0.0636		0.0636	0.0636						158.6745
Total	**0.0557**	**1.0507**	**1.1726**	**1.9200e-003**		**0.0636**	**0.0636**		**0.0636**	**0.0636**						**158.6745**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	3.2400e-003	0.0906	0.0274	1.7000e-004	3.9500e-003	4.9000e-004	4.4500e-003	1.1400e-003	4.7000e-004	1.6100e-003						16.7630
Worker	9.5100e-003	8.6400e-003	0.0748	1.9000e-004	0.0209	1.4000e-004	0.0211	5.5600e-003	1.3000e-004	5.6900e-003						17.5320
Total	**0.0128**	**0.0992**	**0.1023**	**3.6000e-004**	**0.0249**	**6.3000e-004**	**0.0255**	**6.7000e-003**	**6.0000e-004**	**7.3000e-003**						**34.2950**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	13.00	5.00	5.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						83.8689
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						83.8689
NaturalGas Mitigated	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
NaturalGas Unmitigated	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.5888e+006	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
Total		**8.5700e-003**	**0.0779**	**0.0654**	**4.7000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**						**85.2883**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.5888e+006	8.5700e-003	0.0779	0.0654	4.7000e-004		5.9200e-003	5.9200e-003		5.9200e-003	5.9200e-003						85.2883
Total		**8.5700e-003**	**0.0779**	**0.0654**	**4.7000e-004**		**5.9200e-003**	**5.9200e-003**		**5.9200e-003**	**5.9200e-003**						**85.2883**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	505200				83.8689
Total					**83.8689**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	505200				83.8689
Total					**83.8689**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2483	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003
Unmitigated	0.2761	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003
Total	**0.2761**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.0900e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.0900e-003
Total	**0.2483**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						**2.0900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				25.0799
Unmitigated				31.3498

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	13.875 / 0				31.3498
Total					**31.3498**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	11.1 / 0				25.0799
Total					**25.0799**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				18.7079
Unmitigated				37.4159

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	74.4				37.4159
Total					**37.4159**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	37.2				18.7079
Total					**18.7079**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX C. BIOLOGICAL RESOURCES SPECIES LIST

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Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Hoover's bent grass *Agrostis hooveri*	Sandy sites in chaparral, cismontane woodland, valley and foothill grassland. 60-600 meters	April-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Arroyo de la cruz manzanita *Arctostaphylos cruzensis*	Broadleaf upland forest, coastal scrub, closed cone coniferous forest, chaparral, and grassland. On sandy soils. 60-310 meters	December-March	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Santa Lucia manzanita *Arctostaphylos luciana*	Evergreen shrub; occurs on Chaparral with shale outcrops. 350-850 meters	February-March	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at a lower elevation that this species range.
Morro manzanita *Arctostaphylos morroensis*	Chaparral, cismontane woodland, coastal scrub, on stabilized coastal dunes. 5-205 meters	December-March	FT/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Oso Manzanita *Arctostaphylos osoensis*	Evergreen shrub; occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 300-500 meters	February-March	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at a lower elevation than this species range.
Pecho manzanita *Arctostaphylos pechoensis*	Closed coniferous forest, chaparral, and coastal scrub on siliceous shale. 125-850 meters	November to March	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. Species not observed during survey conducted in the appropriate season.
Santa Margarita manzanita *Arctostaphylos pilosula*	Evergreen shrub; occurs in closed coniferous forest, chaparral, and cismontane woodland on shale soils. 170-1100 meters	December - March	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
sand mesa manzanita *Arctostaphylos rudis*	Evergreen shrub; occurs in maritime chaparral and coastal scrub with sandy soils. 25-322 meters	November-February	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. Species not observed during survey conducted in the appropriate season.

Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
dacite manzanita *Arctostaphylos tomentosa* ssp. *daciticola*	Evergreen shrub occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 100-300 meters	March	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
marsh sandwort *Arenaria paludicola*	Marshes and swamps. Grows through dense mats of *Typha*, *Juncus*, *Scirpus*, etc. in freshwater marsh. 10-170 meters	May-August	FE/SE/1B.1	**Marginal Conditions Present:** Smith Reservoir adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
Mile's milk vetch *Astragalus didymocarpus* var. *milesianus*	Annual herb; Occurs in coastal scrub on clay soils. 20-90 meters	March-June	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Coulter's saltbush *Atriplex coulteri*	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland/alkaline or clay; elev. 3-460 meters.	March-October	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
twisted horsehair lichen *Bryoria spiralifera*	An epiphytic lichen that is typically associated with conifers. Largest known population is on Samoa Peninsula in Humboldt County. 0-30 meters.	NA	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
round-leaved filaree *California macrophylla*	Annual herb occurs in cismontane woodland and valley and foothill grassland with clay soils. 15-1200 meters	March-May	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat.
San Luis mariposa-lily *Calochortus obispoensis*	Chaparral, coastal scrub, valley and foothill grassland. Often in serpentine grassland. 75-665 meters	May-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. This species has been documented to occur on other parts of Cal Poly land.
La Panza mariposa lily *Calochortus simulans*	Chaparral, cismontane woodlands, lower montane coniferous forest, valley and foothill grassland; often in sandy, granitic, or serpentine soils. 395-1100 Meters	April-May	--/--/1B.3	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at a lower elevation that this species range.

Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Cambria morning-glory *Calystegia subacaulis* ssp. *episcopalis*	Grassland and rocky areas associated with chaparral and cismontane woodland. 60-500 meters	April-May	--/--/4.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat.
Hardham's evening-primrose *Camissoniopsis hardhamiae*	An annual herb that is typically found in sandy, decomposed carbonate soils. Especially in disturbed or burned areas among chaparral and cismontane woodland. 140 - 945 meters	March-May	-- / -- / 1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
San Luis Obispo sedge *Carex obispoensis*	Closed cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Usually adjacent to seeps, springs, stream sides or other water source with sand, clay, or serpentine. 5-790 meters	April-June	--/--/1B.2	**Marginal Conditions Present:** Smith Reservoir adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
San Luis Obispo owls clover *Castilleja densiflora* ssp. *obispoensis*	Valley and foothill grassland. 10-215 meters	April	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat. This species has been documented on other parts of Cal Poly land.
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	Depressional areas within valley and foothill grassland. Often found in disturbed areas. 1-230 meters	June-November	--/--/1B.1	**Suitable Conditions Absent:** Species not observed during surveys conducted in the appropriate season.
Coastal goosefoot *Chenopodium littoreum*	Annual herb that occurs on coastal dunes. 10 - 30 meters	April - August	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
dwarf soaproot *Chlorogalum pomeridianum* var. *minus*	Chaparral habitats with serpentine soils. 305-1000 meters	May-August	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
Point Reyes birds-beak *Chloropyron maritimum* ssp. *palustre*	Annual herb (hemiparisitic) that occurs in marshes and swamps (coastal salt). Elevation 0-10 meters.	June-October	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.

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Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Brewer's spineflower *Chorizanthe breweri*	Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest; rocky or gravelly serpentine sites; usually in barren areas. 45-800 meters	May -August	--/--/1B.3	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. This species has been documented on other parts of Cal Poly land.
straight-awned spineflower *Chorizanthe rectispina*	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral. 355-1035 meters	April-July	--/--/1B.3	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
San Luis Obispo fountain thistle *Cirsium fontinale* var. *obispoense*	Chaparral, cismontane woodlands; serpentine seeps or bogs. 35-380 meters	February-July	FE/SE/1B.2	**Suitable Conditions Absent:** The project areas do not contain serpentine soils. This species is known to occur on other parts of Cal Poly property.
Cuesta Ridge thistle *Cirsium occidentale* var. *lucianum*	A perennial herb that occurs in openings among chaparral with rocky substrates and serpentinite. Often found on steep rocky slopes and road cuts. 500-750 meters	April - June	-- / -- /1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
surf thistle *Cirsium rhothophilum*	Coastal dunes, coastal bluff scrub. Open areas in central dune scrub; usually in coastal dunes. 3-60 meters	April-June	--/ST/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
popcorn lichen *Cladonia firma*	A squamulose lichen that occurs on soil, detritus, or moss on stabilized coastal dunes among coastal scrub. Known in CA only from Morro Bay and Baywood-Los Osos areas. 30-75 meters	NA	--/--/2B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Pismo clarkia *Clarkia speciosa* ssp. *immaculata*	Sandy soils, openings in chaparral, cismontane woodland, valley and foothill grassland. On ancient sand dunes not far from the coast. 25-185 meters.	May-July	FE/SR/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
dune larkspur *Delphinium parryi ssp. blochmaniae*	Perennial herb. Occurs in maritime chaparral and coastal dunes with sandy or rocky soils. 0-200 meters	April-May	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.

Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
umbrella larkspur *Delphinium umbraculorum*	Perennial herb. Occurs in cismontane woodland. 400-1600 meters.	April-June	--/--/1B.3	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
beach spectaclepod *Dithyrea maritima*	Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. 3-50 meters	March-May	--/ST/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Betty's dudleya *Dudleya abramsii* ssp. *bettinae*	Coastal scrub, valley and foothill grassland, chaparral; rocky barren serpentine exposures. 20-180 meters	May-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
mouse-gray dudleya *Dudleya abramsii* ssp. *murina*	Serpentine outcrops in chaparral, cismontane woodland. 90 - 300 meters.	May-June	--/--/1B.3	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. This species is documented on other parts of Cal Poly land.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	Coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. 5-450 meters.	April-June	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. This species is documented to occur on other parts of Cal Poly land.
Yellow-flowered eriastrum *Eriastrum luteum*	Annual herb occurs in broadleafed upland forest, chaparral, and cismontane woodland on sandy or gravelly soils. 290-1000 meters	May-June	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
Blochman's leafy daisy *Erigeron blochmaniae*	Perennial rhizomatous herb. Occurs in coastal dunes and coastal scrub on sandy soils. 3-45 meters.	July-August	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Indian knob mountainbalm *Eriodictyon altissimum*	Evergreen shrub. Occurs in maritime chaparral, cismontane woodland, and coastal scrub with sandstone substrates. 80-270 meters	March-June	FE/SE/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.

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Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Hoover's button-celery *Eryngium aristulatum* var. *hooveri*	Vernal pools in alkaline depressions near the coast. 5-45 meters.	July	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
San Joaquin spearscale *Extriplex joaquiniana*	Shrub occurs in chenopod scrub, meadows, seeps, playas, and valley and foothill grassland. Often in alkaline soils. 1-835 meters	April-October	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Ojai fritillary *Fritillaria ojaiensis*	Bulbiferous herb occurs in broadleaf upland forest, chaparral, and lower montane coniferous forest on rocky soils. 300-998 meters	March-May	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil and are located at lower elevation than this species range.
mesa horkelia *Horkelia cuneata* ssp. *puberula*	Perennial herb that occurs in chaparral, cismontane woodlands, coastal scrub; in sandy or gravelly sites. 70-810 meters	February-September	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Perennial goldfields *Lasthenia californica* ssp. *macrantha*	A perennial herb from the Asteraceae family. Occurs in coastal bluff scrub, coastal dunes, and coastal scrub.	January-November	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. Species not observed during survey conducted in the appropriate season. This species has been documented on other parts of Cal Poly land.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Annual herb occurs in freshwater wetlands coastal salt marshes, wetland-riparian habitat, alkali sink, playas, vernal-pools, and swamps. 1-1220 meters	February-June	--/--/1B.1	**Marginal Conditions Present:** Smith Reservoir adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
Jones's layia *Layia jonesii*	Chaparral and valley and foothill grassland on clay or serpentine outcrops. 5-400 meters.	March-May	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil. This species is known to occur in other parts of Cal Poly property.

Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
San Luis Obispo County lupine *Lupinus ludovicianus*	Chaparral, cismontane woodland. Open areas in sandy soils of the Santa Margarita formation. 50-525 meters	April-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Santa Lucia bush-mallow *Malacothamnus palmeri* var. *palmeri*	Deciduous shrub occurs in chaparral with rocky substrates. 60-360 meters	May-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Slender bush-mallow *Malacothamnus gracilis*	Perennial deciduous shrub that occurs in chaparral on rocky soil. 190 - 575 meters	May-October	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Palmer's monardella *Monardella palmeri*	Chaparral and cismontane woodland on serpentine slopes. 200-800 meters.	June-August	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
southern curly-leaved monardella *Monardella sinuata* ssp. *sinuata*	Annual herb that occurs in sandy soil among chaparral, cismontane woodland, coastal dunes, and coastal scrub with openings. 0-300 meters	April-September	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
shinning navarretia *Navarretia nigelliformis* ssp. *radians*	Annual herb that occurs in vernal pools within cismontane woodland and valley and foothill grassland. 76-1000 meters	April-July	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
coast woolly-heads *Nemacaulis denudate* var. *denudata*	Annual herb that occurs on coastal dunes. 0-100 meters	April – September	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
hooked popcorn-flower *Plagiobothrys uncinatus*	Annual herb occurs in chaparral, cismontane woodland, and valley and foothill grassland with sandy soils. 300-760 meters	April-May	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Diablo Canyon blue grass *Poa diaboli*	Rhizomatous herb occurs in closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub with shale substrates. 120-400 meters	March-April	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.

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Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
adobe sanicle *Sanicula maritima*	Moist seeps within coastal prairie, chaparral, meadows, and valley and foothill grassland habitats in clay or serpentine soils. 30-240 meters	February-May	--/SR/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
black-flowered figwort *Scrophularia atrata*	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub. Around swales and in sand dunes. Sand, diatomaceous shale and soils derived from other parent material. 10-250 meters	March-April	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Blochman's ragwort *Senecio blochmaniae*	A perennial herb that occurs in coastal dunes. 0-100 meters	May-October	--/--/4.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Cuesta pass checkerbloom *Sidalcea hickmanii* ssp. *anomala*	Closed-cone coniferous forest with rocky serpentine slopes. 600-800 meters.	May-June	--/SR/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
most beautiful jewel-flower *Streptanthus albidus* ssp. *peramoenus*	Chaparral, cismontane woodlands, valley and foothill grasslands on serpentine soil. 110-1000 meters	April-June	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
California seablite *Suaeda californica*	Low growing evergreen shrub occurs in coastal salt marshes and swamps. 0-15 meters	July-October	FE/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Splitting yarn lichen *Sulcaria isidiifera*	An epiphytic lichen that occurs on branches of old growth oaks and shrubs in coastal scrub and woodland habitats.	NA	--/--/1B.1	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian corridor adjacent to the Plant Sciences site support marginal conditions for this species.
saline clover *Trifolium hydrophilum*	Annual herb that occurs in marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. 0-300 meters.	April-June	--/--/1B.2	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.

Table 1. Special-Status Plant Species and Natural Communities Investigated for Potential Occurrence Elevation is 300 to 600 feet (91 m-182 m). Soil is Los Osos Loam

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caper fruited tropidocarpum *Tropidocarpum capparideum*	Valley and foothill grassland habitats on alkaline hills 1-455 meters	March-April	--/--/1B.1	**Suitable Conditions Absent:** The project areas do not support suitable habitat or soil.
Natural Communities of Concern				
central dune scrub	A back dune plant community characterized by low growing, drought tolerant shrubs that develop considerable cover. Diagnostic species include *Ericameria ericoides* and *Lupinus chamissonis*.			Neither of the sites support any dune habitats.
central foredunes	A foredune plant community characterized by scattered low growing perennial plants including *Abronia* sp. *Ambrosia* sp. and *Cackile* sp. Usually occurring in areas exposed to tidal action.			Neither of the sites support any dune habitats.
central maritime chaparral	A variable scrub community of moderate to high cover dominated by various *Arctostaphylos* sp. Found on well drained sandy soils in areas subject to summer fog.			Neither of the sites support any chaparral habitats.
coastal brackish marsh	Marsh habitat dominated by perennial, emergent, herbaceous monocots such a Scirpus sp. Salinity varies but is brackish from freshwater input. Usually located at interior edges of coastal bays and estuaries or in coastal lagoons.			Neither of the sites support brackish marsh habitat.
coastal and valley freshwater marsh	A wetland community that is found in areas of permanently or prolonged freshwater saturation without significant current or flow. Vegetation is dominated by perennial emergent monocots including cattails and rushes.			Smith Reservoir and Shepard Reservoir adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support coastal and valley freshwater marsh.
northern coastal salt marsh	Marsh habitat supporting herbaceous, suffrutescent, salt tolerant hydrophytes often active in summer and dormant in winter. Characteristic species include Jaumea carnosa, Limonium californicum, and Frankenia salina. Developed around Humboldt Bay, Tomales Bay, San Francisco Bay, Elkhorn Slough, and Morro Bay.			Neither of the sites support coastal salt marsh habitat.
northern interior cypress forest	An open serotinous forest that is often found on dry, rocky soils. Often associated with serpentine soils. Vegetation consists of dense to sparse stands of *Cupressus* species.			Neither of the sites support northern interior cypress forest.

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serpentine bunchgrass	An open grassland community that is dominated by perennial bunch grasses. Typically, total cover is low but native species' dominate the composition. Associated species include *Nassella cernua*, *N. lepida*, *N. pulchra*, and *Melica californica*. Always occurring on serpentine substrates.			Neither of the sites support any native grassland habitats.
valley needlegrass grassland	Grassland reaching up to 2 feet tall and dominated by *Nassella* sp., which is a native tussock forming grass. Annual grasses occur between the perennials, often exceeding the bunch grasses in cover. Usually occurs on fine-textured soils that are wet in the winter and very dry in the summer.			Neither of the sites support any native grassland habitats.

General references: CNDDB 2016, Baldwin 2012, All plant descriptions paraphrased from CNPS 2016.
Unless otherwise noted all habitat and distribution data provided by CNDDB and CNPS.

Status Codes
--= No status

Federal:
FE = Federal Endangered
FT=Federal Threatened

State:
SE=State Endangered
ST= State Threatened
SR= State Rare

Rationale Terms:
Species Present: Species was or has been observed in the survey area.
Suitable Conditions Present: The appropriate habitat, soils, and elevation are present in the survey area.
Marginal Conditions Present: The appropriate habitat and/or soils are present but other factors (past disturbances, elevation range) may preclude species occurrence.
Suitable Conditions Absent: The survey area did not support the appropriate habitat, soils, and/or elevation for the species.

California Native Plant Society (CNPS):
Rank 1A = plants assumed to be extirpated in California and rare or extinct elsewhere
Rank 1B = rare, threatened, or endangered in California and elsewhere.
Rank 2A = plants assumed to be extirpated in California, but common elsewhere.
Rank 2B = rare, threatened, or endangered in California, but more common elsewhere
Rank 3 = plants that about which more information is needed.
Rank 4 = a watch list plants of limited distribution.

Threat Code:
.1 = Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered I California (<20% of occurrences threatened or no current threats known)

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
Gastropods			
Morro shoulderband snail *Helminthoglypta walkeriana*	Restricted to Baywood fine sand in coastal dune and coastal sage scrub communities near Morro Bay. Often occurs under shrubs that exhibit dense, low growth and have ample contact with the ground. Utilizes mock heather, seaside golden yarrow, deerweed, sand almond, and ice plant.	FE/--/--	**Suitable Conditions Absent:** Soils within the project alignment consist of loam and will not support MSS. The project areas are located east of this species range.
Insects			
Monarch butterfly *Danaus plexippus*	Occurs along the coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind protected tree groves (eucalyptus, Monterey pine and cypress), with nectar and water sources nearby.	--/SA/--	**Marginal Conditions Present:** The riparian corridors of Smith Reservoir adjacent to the proposed Oppenheimer site and Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species. Species was not observed during survey.
Morro Bay blue butterfly *Plebejus icarioides morroensis*	Locally common from March to July, this species flies only along the immediate coast of San Luis Obispo and western Santa Barbara counties. Feeds on Lupinus chamissonis. This variety is restricted to the dunes at Vandenberg Air Force Base, Pismo/Guadalupe dune system and the dunes of Morro Bay.	--/SA/--	**Suitable Conditions Absent**: The project areas do not support the appropriate habitat and is not located on the immediate coast.
Branchiopods			
Vernal pool fairy shrimp *Branchinecta lynchi*	Occur in vernal pool habitats including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland (Eriksen and Belk 1999).	FT/-- /--	**Suitable Conditions Absent**: The project sites do not support vernal pools.
California linderiella *Linderiella occidentalis*	Seasonal ponds in grasslands, sandstone depressions, and alluvial flats with hardpan beneath.	--/--/--	**Suitable Conditions Absent**: The project sites do not support vernal pools.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
Fish			
Tidewater goby *Eucyclogobius newberryi*	Occurs in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	FE/--/CSC	**Suitable Conditions Absent**: The project sites do not support suitable brackish waters.
South-central California coast steelhead DPS *Oncorhynchus mykiss irideus*	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT, PCH /-- /CSC	**Suitable Conditions Present**: Stenner Creek located adjacent to the Plant Sciences site supports suitable aquatic habitat when water is present. The Oppenheimer project site does not support suitable aquatic habitat.
Amphibians			
foothill yellow-legged frog *Rana boylii*	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Range in California includes the north and central coasts and the western Sierras.	--/--/CSC	**Marginal Conditions Present:** Smith and Shepard Reservoirs adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
California red-legged frog *Rana draytonii*	Aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails.	FT /-- /CSC	**Marginal Conditions Present:** Smith and Shepard Reservoirs adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
western spadefoot *Spea hammondii*	Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	--/--/CSC	**Suitable Conditions Absent**: Smith Reservoir could provide aquatic habitat, but the adjacent uplands are developed and do not provide the necessary upland habitat this species requires.
Coast range newt *Taricha torosa torosa*	Breed in ponds, reservoirs, and slow-moving streams. Frequents terrestrial habitats such as oak woodlands.	--/--/CSC	**Marginal Conditions Present:** Smith and Shepard Reservoirs adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
Reptiles			
silvery legless lizard *Anniella pulchra pulchra*	Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/CSC	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
black legless lizard *Anniella pulchra nigra*	Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/CSC	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
western pond turtle *Emys marmorata*	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	--/--/CSC	**Marginal Conditions Present:** Smith and Shepard Reservoirs adjacent to the proposed Oppenheimer site and the bed of Stenner Creek adjacent to the Plant Sciences site support marginal conditions for this species.
Coast horned lizard *Phrynosoma coronatum (blainvillii* population)	Frequents a wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub, and chaparral in arid and semi-arid climate conditions. Species prefers friable, rocky, or shallow sandy soils.	--/--/CSC	**Suitable Conditions Absent**: The project sites do not support sandy soil, gravelly washes, or sage scrub habitats.
Birds			
Cooper's hawk *Accipiter cooperii*	Deciduous riparian woodland habitat throughout California. Cooper's hawks nest in deciduous, mixed-deciduous, and evergreen forests, as well as in suburban and urban environments. Cooper's hawks tend to nest in more open areas that have older and larger trees.	MBTA/--/--	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
tricolored blackbird *Agelaius tricolor*	(Nesting colony); requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey.	MBTA/--/CSC	**Marginal Conditions Present:** Smith and Shepard Reservoir adjacent to the proposed Oppenheimer site supports marginal conditions for this species.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
grasshopper sparrow *Ammodramus savannarum*	A small grassland bird that largely occurs in the plains states and eastern U.S. Has breeding range in California grasslands.	-- / -- / CSC	**Marginal Conditions Present:** The non-native annual grasslands associated with the grazing areas surrounding the Oppenheimer site could support this species.
golden eagle *Aquila chrysaetos*	Usually occurring in mountainous areas with varying vegetative cover; removed from people. May forage in grasslands and other open habitats. Nests on cliff edges and rarely in tall trees.	MBTA/-- /FP, Sec. 3503.5	**Suitable Conditions Absent**: the sites do not support cliffs for nesting habitat.
great blue heron *Ardea herodias*	Common throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills.	MBTA/--/--	**Marginal Conditions Present:** This species may be found foraging for small mammals in the pasture lands located in the Oppenheimer study area.
burrowing owl *Athene cunicularia*	Open, dry grasslands, deserts, and scrublands. Subterranean nester, dependent upon burrowing mammals.	MBTA/-- /CSC	**Suitable Conditions Absent:** The project areas do not support suitable habitat.
ferruginous hawk *Buteo regalis*	(Wintering) open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats; eats lagomorphs, ground squirrels, and mice.	MBTA/--/--	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Forests to open riparian woodlands with thick under story.	FT, MBTA/SE/--	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
white-tailed kite *Elanus leucurus*	Open grasslands, meadows, or marshlands for foraging close to isolated trees for nesting and perching.	MBTA/--/FP	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
California horned lark *Eremophila alpestris actia*	Occurs in short grass prairies, coastal plains, fallow grain fields and alkali flats. Found in coastal regions from Sonoma to San Diego county, and west to the San Joaquin Valley. .	MBTA/--/--	**Marginal Conditions Present:** The non-native annual grasslands associated with the grazing areas surrounding the Oppenheimer site could support this species.
merlin *Falco columbarius*	A small falcon that winters in California and the plains states. Breeds in Canada and Alaska. Nests in trees associated with open forests adjacent to open areas. Preys on small birds	MBTA/--/--	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
Prairie falcon *Falco mexicanus*	Occurs in dry, open terrain that is level or hilly and breeds on cliffs.	MBTA/--/WL	**Suitable Conditions Absent:** The non-native annual grasslands associated with the grazing areas surrounding the Oppenheimer site could provide foraging area for this species. Nesting habitat is not present in the project areas.
California black rail *Laterallus jamaicensis coturniculus*	Shore birds known to frequent tidal salt marshes. Utilize densely vegetated mud flats and high tide line in salt water marsh systems.	--/ST/--	**Suitable Conditions Absent:** The project study areas do not contain tidal salt marshes or densely vegetated mudflats. Species not observed during the surveys.
loggerheaded shrike *Lanius ludovicianua*	A predatory passerine that frequents open areas with scattered shrubs. Commonly observed foraging in grassland, desert scrubs, and waste places. Builds nests in isolated trees or shrubs in the vicinity of foraging areas.	-- / -- / CSC	**Marginal Conditions Present:** The non-native annual grasslands associated with the grazing areas surrounding the Oppenheimer site could support this species.
purple martin *Progne subis*	Occupies valley foothill and montane hardwood forests, conifer forests, and riparian habitats. May nest in old woodpecker cavities or in human-made structures such as bridges and culverts. Feeds on insects.	--/--/CSC	**Marginal Conditions Present:** Smith Reservoir riparian corridor adjacent to the proposed Oppenheimer site and the Stenner Creek riparian area adjacent to the Plant Sciences site support marginal conditions for this species.
California clapper rail *Rallus longirostris obsoletus*	Occurs within salt and brackish marshes dominated by pickleweed and Pacific cordgrass. Currently, this species is restricted to marsh areas within the vicinity of San Francisco Bay. The last California clapper rail to be sighted in Morro Bay was documented in 1939.	FE/SE/--	**Suitable Conditions Absent:** The project study areas do not contain tidal salt marshes or densely vegetated mudflats. Species not observed during the surveys.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
Class Aves Other migratory bird species (nesting)	Annual grasslands, coastal scrub, chaparral, and oak woodlands may provide nesting habitat.	MBTA/--/--	**Suitable Conditions Present:** Potential nesting habitat occurs throughout the sites. Pre-disturbance nesting bird surveys are proposed to avoid impacts to nesting birds.
Mammals			
Pallid bat *Antrozous pallidus*	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings.	--/--/CSC	**Marginal Conditions Present**: The hillside adjacent to the Oppenheimer site could provide day roost and foraging areas. The existing buildings could provide night roosts.
Townsends big-eared bat *Corynorhinus townsendii*	Occurs in a wide variety of habitats; most common in mesic (wet) sites. May use trees for day and night roosts; however, requires caves, mines, rock faces, bridges or buildings for maternity roosts. Maternity roosts are in relatively warm sites.	--/--/CSC	**Marginal Conditions Present:** The various facilities at the sites contain suitable habitats for roosting bats. Avoidance and minimization measures are proposed.
Morro Bay kangaroo rat *Dipodomys heermanni morroensis*	Typically occurs in habitats associated with stabilized dunes and coastal dune scrub communities with dominant vegetation including mock heather, buck brush, and deer weed.	SE/FE/--	**Suitable Conditions Absent:** The project study areas is east of this species historic range and do not contain the appropriate habitats.
Western mastiff bat *Eumops perotis*	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in cliff faces, high buildings, trees, and tunnels.	--/--/CSC	**Marginal Conditions Present:** The various facilities at the sites contain suitable habitats for roosting bats. Avoidance and minimization measures are proposed.
San Diego desert woodrat *Neotoma lepida intermedia*	Ranges from Baja California northward to northern San Luis Obispo County. Typically occurs in woodlands and coastal scrub habitats. Build nests within cracks and rock crevices, or in clumps of cactus.	--/--/CSC	**Suitable Conditions Absent:** The project study area does not support woodland communities with significant rock crevices. Species not observed during surveys.

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ CDFW	Rationale for Expecting Presence or Absence
big free-tailed bat *Nyctinomops macrotis*	Rare vagrant in California, probable resident in Texas, New Mexico, and southern Arizona. Probably does not breed in California. Prefers rugged, rocky canyons but will roost on buildings or in caves and trees.	--/--/CSC	**Marginal Conditions Present:** The various facilities at the sites contain suitable habitats for roosting bats. Avoidance and minimization measures are proposed.
American badger *Taxidea taxus*	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	--/--/CSC	**Suitable Conditions Absent:** The non-native annual grasslands associated with the grazing areas surrounding the Oppenheimer site are subject to too much human and equestrian activity to support American badger.

General references: Unless otherwise noted all habitat and distribution data provided by California Natural Diversity Database

Status Codes
--= No status

Federal:
FE = Federal Endangered
FT= Federal Threatened
FC= Federal Candidate
CH= Federal Critical Habitat
PCH= Proposed Federal Critical Habitat
MBTA= Protected by Federal Migratory Bird Treaty Act

State:
SE= State Endangered
ST= State Threatened
SCT= State Candidate Threatened

California Department of Fish and Game:
CSC= California Special Concern Species
FP= Fully Protected Species
SA= Not formally listed but included in CDFW "Special Animal" List.

Rationale Terms:
Species Present: Species was observed or has been reported in the survey area.
Suitable Conditions Present: The survey area is within the species range and supports the appropriate habitat, soils, and elevation.
Marginal Conditions Present: The survey area is in the species range and supports the appropriate habitat and/or soils but other factors (past disturbances, presence of predators) may preclude species occurrence.
Suitable Conditions Absent: The survey area is not within the species range and/or does not support the appropriate habitat, soils, and/or elevation for the species.

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APPENDIX D. ARCHITECTURAL RESOURCE EVALUATION SCOPING REPORT

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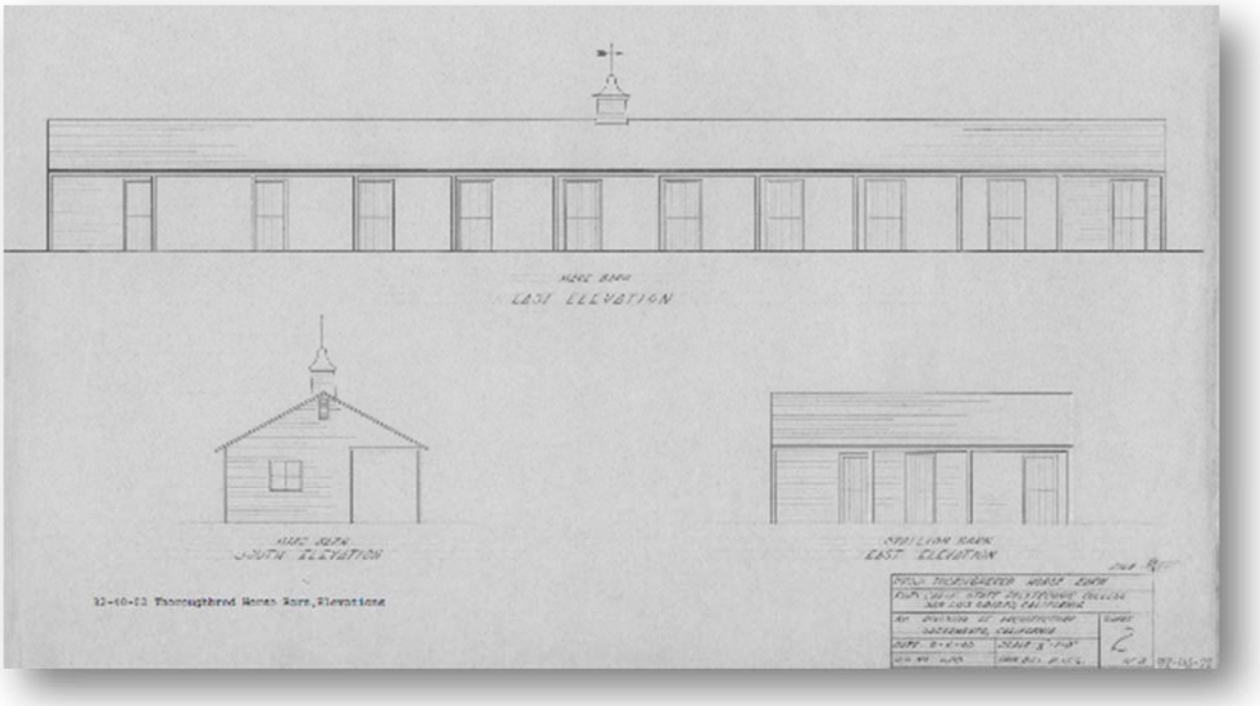
ARCHITECTURAL RESOURCE EVALUATION SCOPING REPORT

FOR ELEVEN CAL POLY HISTORIC-PERIOD ARCHITECTURAL RESOURCES:
BUILDING NOS. 032-C, 032-E, 032-F, 032-O, 048-A, 016-A, 016-O, 016-B, 017-O, 017-D, and 017-E
SAN LUIS OBISPO COUNTY, CALIFORNIA



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JANUARY 3, 2017

SUMMARY OF FINDINGS

Eleven historic-period architectural resources (i.e., resources that are 50 years of age or older) comprise the Study Population for this scoping report; all eleven are located on the Cal Poly campus in San Luis Obispo, California (Table 1).

This report finds that one resource, **Building No. 032C - the Equine Center Breeding Barn (Mare Barn)**, meets one of the four criteria for listing in the California Register of Historical Resources and therefore constitutes a historical resource for the purpose of CEQA. The Mare Barn, constructed in 1940, is eligible under Criterion 1: *Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural hreitage of California or the United States.*

The Mare Barn demonstrates its eligibility through its strong association with California Polytechnic School's Thoroughbred Breeding Program, its association with the School's curriculum emphasizing vocational "learn by doing" training, and its strong association with pari-mutuel wagering, the School's primary source of funding in the years 1940-1942. These years also mark the transition of the School from a strictly vocational training institution to a college authorized to confer the Bachelor of Science degree in specific areas. The period of significance is therefore 1940-1942, and the footprint of the building is the boundary of the historical resource.

Table 1. Historic-period architectural resources in the Study Population (Source: Cal Poly)

Building Number	Building Name	Occupancy Date	California Historical Resource Status Code
032-C	Equine Center Breeding Barn	3/1/1940	6Z
032-E	Equine Center Stallion Barn	3/1/1940	6Z**
032-F	Equine Center Horse Barn	3/1/1940	6Z
032-O	**Cal Poly Equine Center (Mare Barn)**	**3/1/1940**	**3CS***
048-A	Environmental Horticulture Science Residence	1/1/1938	6Z
016-A	Beef Unit Herdsman Residence	1/1/1938	
016-O	Beef Unit	1/1/1952	6Z
016-B	Beef Unit Feed Unit	1/1/1952	6Z
017-O	Crop Science	8/1/1962	6Z
017-D	Crop Science Irrigation Pipe Storage	8/1/1962	6Z
017-E	Crop Science Storage	8/1/1962	6Z

*Appears eligible for California Register as an individual property through survey evaluation
**Found ineligible for National Register, California Register or Local designation through survey evaluation

There is no formal process of consultation with SHPO under CEQA, and thus no formal concurrence in determinations of significance and effect is required.

It is especially recommended that the cupola be retained for exhibit and interpretive purposes in the new Oppenheimer facility, and that other elements such as the iron gates be incorporated to the extend feasible.

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1. INTRODUCTION

This architectural evaluation was prepared to assist Cal Poly in meeting pertinent regulatory responsibilities -- pursuant to §15064.5 of the CEQA Guidelines, Public Resources Code §5024.1 and Public Resources Code §21084.1 -- in connection with the proposed Peter and Mary Beth Oppenheimer Equestrian Center on the Cal Poly campus and for future planning. Historic-period architectural resources (defined as resources 50 years of age or older) require evaluation for potential significance and to determine whether they meet the criteria for listing in the California Register of Historical Resources.

2. METHODOLOGY

Preliminary research consisted of reviewing Cal Poly histories (Smith [1957], Robert E. Kennedy Library [2001], Marx [2002]). An appropriate historical context was then identified. While such aspects as the physical condition, style, materials, and workmanship of architectural resources can be considered to some extent on their own merits, the significance of these resources can be determined only with reference to the historic circumstances that created them. The historical context for the eleven buildings in the project area broadly includes the development of the physical campus and curriculum through the first half of the twentieth century, with additional contextual information on the equine program, pari-mutuel funding, and the contributions of the Division of the California State Architect, individual architects, and individual faculty members and employees.

A field visit was made on December 7, 2016, to examine the project sites and to document the eleven historic-period built-environment resources. Documentation included taking extensive notes on the physical characteristics of the buildings and taking a series of digital photographs, many of which are included in this report.

Detailed, site-specific research was conducted in the Julian McPhee Papers (Collection No. 144.02, Box 5), housed in the University Archives, Robert E. Kennedy Library, Cal Poly. The author wishes to acknowledge the kind assistance of Laura Sorvetti, Library Services Specialist, in making the McPhee Papers and other materials from the University Archives and Special Collections available.

Additional research was also conducted via online databases:

http://search.ancestry.com/ (federal census; birth and death dates)

http://cdnc.ucr.edu/cgi-bin/cdnc (California Digital Newspaper Collection)

http://www.oac.cdlib.org (Online Archive of California)

http://digitalcommons.calpoly.edu/ (Cal Poly newspapers and yearbooks)

3. HISTORICAL CONTEXT

This section provides brief summaries of the historical themes that shaped this scoping report.

3.1 Development of Campus and Curriculum

The first iteration of present-day Cal Poly – the California Polytechnic School – was co-educational and intended to provide high-school age students with practical training in the skills "conducive to the further advancement of engineering needed for all areas of agriculture, to include a modern household."[1] The curriculum introduced to the first students admitted in 1903 focused on agriculture, animal and dairy husbandry, carpentry, and ironworking for the boys and household arts for the girls. The instructor for the carpentry and iron trades had both supervised and taken part in the construction of the first campus buildings, designed by noted regional architect William H. Weeks. Boys also assisted in the construction of campus agricultural buildings, such as the poultry pens built in 1908. Coursework included ample hands-on, physical labor that directly contributed to the construction and maintenance of campus facilities, the tending of campus livestock, and even meal preparation and janitorial work.

Until 1916, the graduates of California Polytechnic School could not transfer directly to a college; they still had to complete high-school level coursework to achieve sufficient academic preparation.[2] The third School Director, Robert Weir Ryder, set about creating a new academic division that remedied this obstacle to higher learning.

By the 1920s, under the presidency of Nicholas Ricciardi, the development of the physical campus responded more and more to the development of the school curriculum, with the construction of new buildings and the addition of new courses. Budget cuts in the early 1920s nearly shut the school down. Under the leadership of President Benjamin Crandall, from 1924 to 1933, the school rebounded with an augmented curriculum, made even broader through the establishment of a junior college program in 1927. Crandall's strengths were chiefly effective administration and reformation of the curriculum, but he can be credited with introducing the idea of "student projects" in agriculture. The onset of the Great Depression reduced student enrollment, and the need to economize on expenses led to the banning of co-eds from the school – a cost-cutting measure. The academic curriculum and the junior college program were also abandoned. State funding was reduced again in 1933, and the State Board of Education also gave the California Polytechnic School two years to turn things around, or the school would be shut down.[3]

The man selected to "turn things around" as the next California Polytechnic School president was Julian A. McPhee, who served from 1933 to 1966. By 1933, McPhee had already gained broad experience as both Assistent State Supervisor and State Supervisor of the State Bureau of Agricultural Education. He had already made two extensive examinations of the agricultural program at the California Polytechnic School and had already formulated a number of far-reaching improvements. For one thing, he envisioned the School as a training ground for future teachers of agricultural subjects, and he recommended that the curriculum focus on its original mission of vocational education – not only in agriculture but also in the industrial arts. In accepting the post in San Luis Obispo, he also retained (with

[1] California Polytechnic School Director Dr. Leroy Anderson, quoted in Thomas Maxwell-Long, *San Luis Obispo and Cal Poly in Vintage Photographs,* Chicago: Arcadia Publishing, 2001, p. 63.
[2] Nancy Loe et al., *Cal Poly: The First Hundred Years,* San Luis Obispo: Robert E. Kennedy Library, 2001, p. 27.
[3] Loe et al., 2001, pp. 31-36.

no additional salary) his position as head of the State Bureau of Agricultural Education. McPhee's administration was notable for his ingenuity in securing funding for campus projects and for his broad network of support for the School (which included the State Fair Board).

All eleven of the historic-period architectural resources in the Study Population were constructed during McPhee's 33-year tenure as President. Based on the research conducted and the December 7 site visit, Of these, only the Mare Barn, constructed in 1940, meets the eligibility criteria for listing in the California Register of Historical Resources. The following historic context themes relate to the Mare Barn and to the Thoroughbred Horse Breeding Program instituted cooperatively by the California Polytechnic School and the California Horsebreeders' Association in mid 1940.

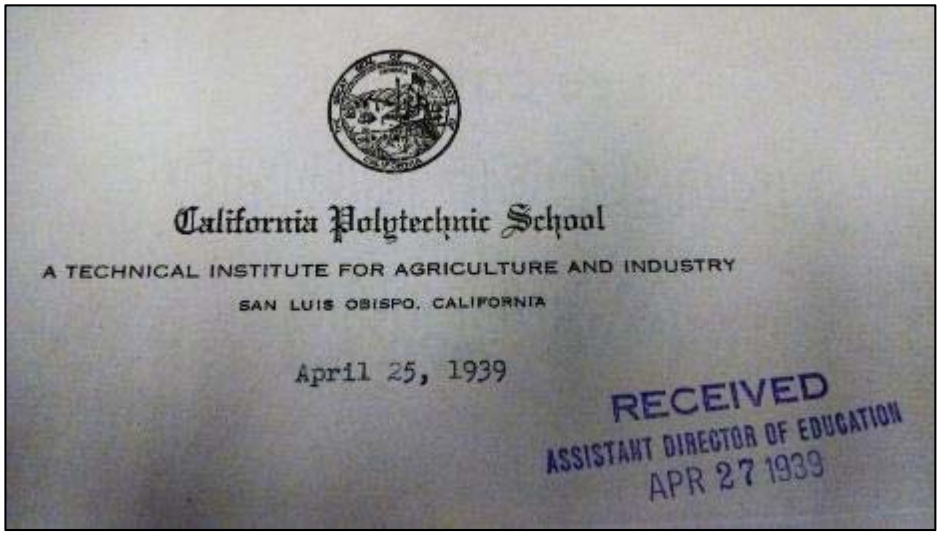

Figure 1. During Julian McPhee's presidency, the California Polytechnic School's emphasis was on agriculture and the industrial arts, as indicated by the School's letterhead.

3.2 Development of the Thoroughbred Horse Breeding Program

The Thoroughbred Horse Breeding Program had its origins in a combination of the School's learn-by-doing philosophy, President McPhee's campus improvement goals, and a peculiar funding source that McPhee had identified and lobbied for: revenues from pari-mutuel wagering on horse racing. In 1933, the same year that McPhee accepted the presidency at California Polytechnic School, California voters approved a proposition legalizing pari-mutuel wagering on horse-racing:

> The legalization of pari-mutuel betting was in part driven by the advance of technology, notably the development of the totalizator, commonly called a tote board, in the 1920s. [The tote board performed a series of functions: it counted money, recorded ticket sales and wagers, computed the odds, and displayed the results on a large message board.] Developed in New Zealand, the first totalizators installed in the United States were at Hialeah Park, Florida, in 1932 and at Arlington Park, Chicago, in 1933. The installation of the tote boards spurred growth in horse racing by providing the public with a safe alternative to using illegal bookmakers to bet on races. In 1933, California was among the first states to legalize pari-mutuel gambling on horse racing

> as a means of regulating the industry and gaining revenue. Dozens of states followed suit over the next decade.[4]

President McPhee succeeded in persuading the Legislature to earmark one-third of the State's pari-mutuel proceeds specifically and exclusively to the California Polytechnic School. The School's share was reduced to one-quarter of the State's proceeds in 1937, but in the 1937-1939 period, 55 percent of the School's funding came from pari-mutuel revenues; by 1942, 94 percent of the School's funding came from horse-racing.[5] This same interval coincides with the development of the Thoroughbred Horse Breeding Program.[6]

The physical condition of the various animal units had been roundly criticized by McPhee during his pre-presidency surveys of the campus. The agricultural building program he outlined for 1933-1935 included remodeling a barn and building a feeding shed for the Sheep Unit, building farrowing houses and feeding units for the Swine Unit, building two barns for the Beef Unit, and building a "pedigree pen" and eight "student brooder units" for the Poultry Unit. The notations for the Poultry Unit are especially interesting inasmuch as they document McPhee's interest in improving the School's breeding stock (another weak point in the School's earlier organization) and in continuing the student project component of the curriculum.

Under President McPhee, the School worked with the State Department of Education amd the State Division of Architecture to carry out the building program he envisioned. Beyond those already proposed or under construction, McPhee wrote , "All the rest of the major improvements will have to wait until we have obtained an educational policy and program for the California Polytechnic School and have it presented and approved by [State Superintendent of Instruction] Dr. Dexter."[7] In another letter, to Assistant State Architect P. T. Poage, McPhee elaborated on the "educational policy and program":

> The California Polytechnic School must be considered a state institution, serving the entire state, since students are enrolled from 50 different counties in California. There are also students registered from other states. The total enrollment for the year 1937-38 was 517 and it is estimated that there will be 700 students during the school year of 1938-39….
>
> The California Polytechnic School is the only state institution of college grade that is conducted on a strictly vocational education basis [i.e., graduates received a certificate of completion, but no degrees were conferred]. It serves a very definite need in training boys for specific employment in the agricultural and industrial field of the state.[8]

In mid 1940, however, the School was approached by the California Thoroughbred Breeders' Association with an offer to establish a breeding program on the campus, with a beginning donation donation of six

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[4] http://www.allgov.com/usa/ca/departments/business-consumer-services-and-housing-agency/california_horse_racing_board?agencyid=219.

[5] Loe et al., 2001, pp. 44-45.

[6] The January 23, 1942, issue (p. 2) of *The California Polytechnic El Mustang* reported: "For the past several years the funds available to Polytechnic from race track revenue have been the sole support of the school. In 1939, about $370,000 was appropriated to the school from this source. Last year [1941] the figure was larger…. With the closing of racetracks during the war, California Polytechnic had to look to other sources of their income."

[7] McPhee Papers, Box 5, File folder: *Building Program: General, 1938.*

[8] McPhee Papers, Box 5, File folder: *Building Program: General, 1938-1940.*

pregnant mares and two stallions. The School lacked appropriate facilities to receive the valuable animals, there was a labor shortage in the region, and the Division of State Architecture was already occupied with many other projects. A collaborative decision was made to have the School do the construction work, under the supervision of Merritt B. "Pop" Smith, following plans provided by the State Architect, under the general design supervision of William K. Bartges.[9] Bartges already had considerable experience designing facilities for similar uses and had already worked with President McPhee on other campus buildings. By early September 1940 the architectural plans and elevations had been drawn up.

The following figures are based on contemporary documents relating to the construction of the Mare Barn for the Thoroughbred Horse Breeding project. These documents are from Cal Poly Facilities and the Special Collections and University Archives housed in the Kennedy Library. Copies of correspondence (Figures 11-27), presented here in chronological order from August to November 1940, are all filed in Box 5 of the McPhee Papers, in the University Archives. They provide important contemporary details about architectural intent, materials, and the collaborative decision-making process. The active participation of School staff and students in the actual construction of the Mare Barn is also evident.

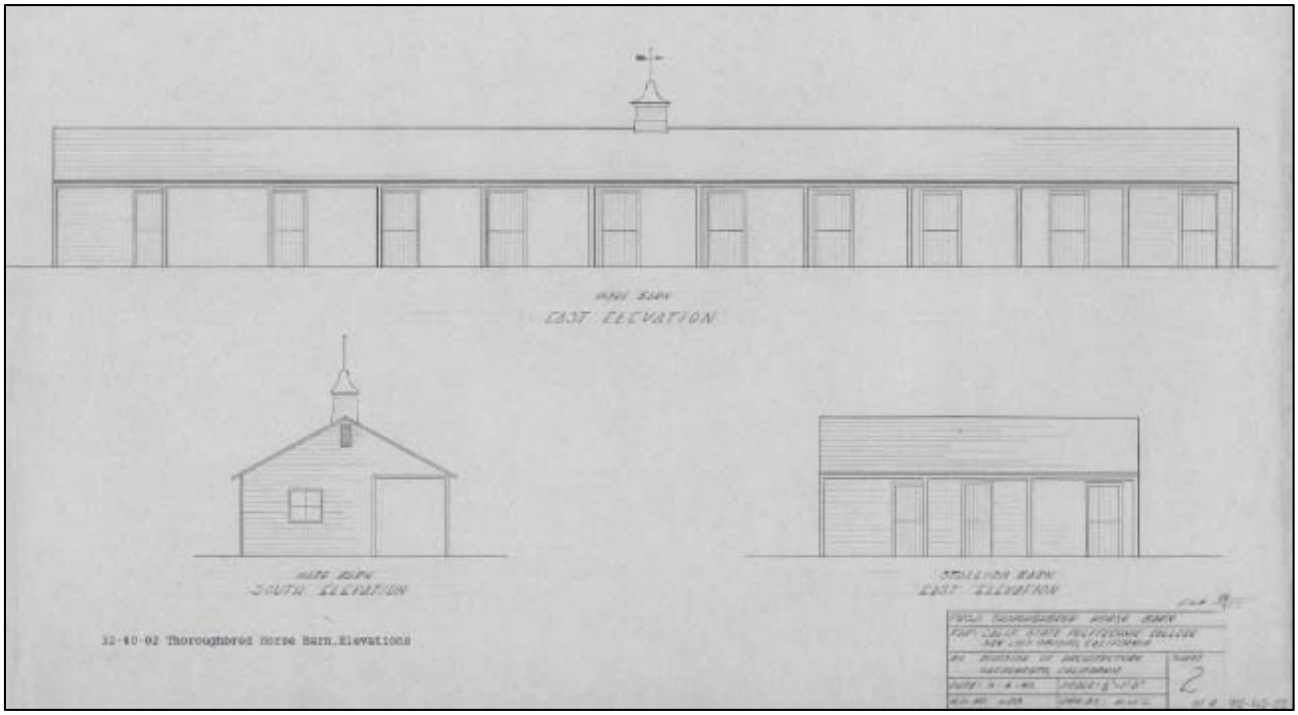


Figure 2. Architectural elevations of Mare Barn and Stallion Barn, prepared September 4, 1940, by the State Division of Architecture, under the supervision of William K. Bartges (Cal Poly Facilities).

[9] "Pop" Smith was California Polytechnic School's band director from 1924 to 1936, but his principal career was as a carpenter, foreman, and building contractor. William K. Bartges was a prominent Berkeley architect before moving to Sacramento, where he spent 30 years with the Division of State Architecture. He retired in 1961. http://patch.com/california/berkeley/bp--in-branch-library-settlement-losers-outnumber-winners.

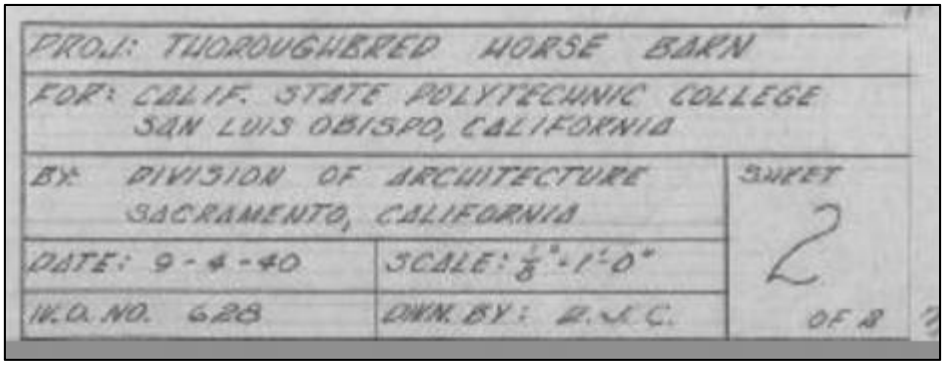


Figure 3. Detail of title block of architectural rendering shown in Figure 2, above.

Figure 4. East elevation of Mare Barn and paddocks at their original location (University Archives).

Figure 5. Four of the five mares donated to the Thoroughbred Horse Breeding Project, photographed in front of the newly completed Mare Barn. The photo was probably taken during the dedication ceremony on December 8, 1940 (Cal Poly Special Collections via http://digitalcommons.calpoly.edu/).

Figure 6. The Thoroughbred Horse Barns and paddocks at their original 1940s-1950 location.

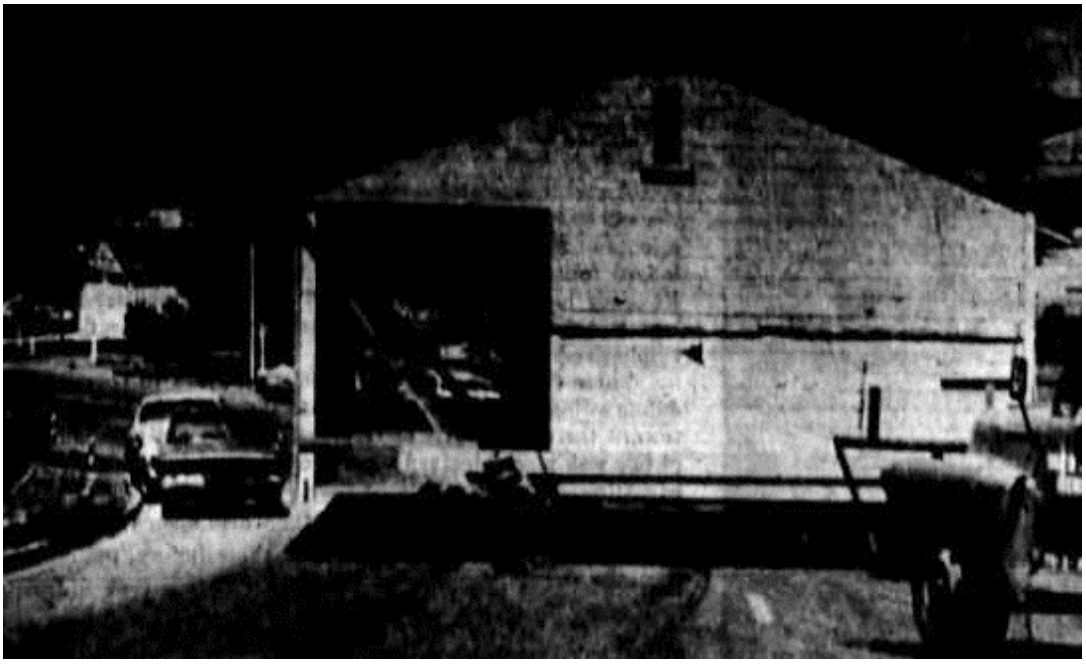


Figure 7. The Thoroughbred Horse Breeding project barns were moved to their current location in July 1960 (*El Mustang,* July 8, 1960, p. 3).

Figure 8. Photograph of the Stallion Barn and breaking corral, c 1961, following their relocation. The corral is no longer extant.

INTRA DEPARTMENT CORRESPONDENCE

August 3, 1940

TO Mr. Julian A. McPhee

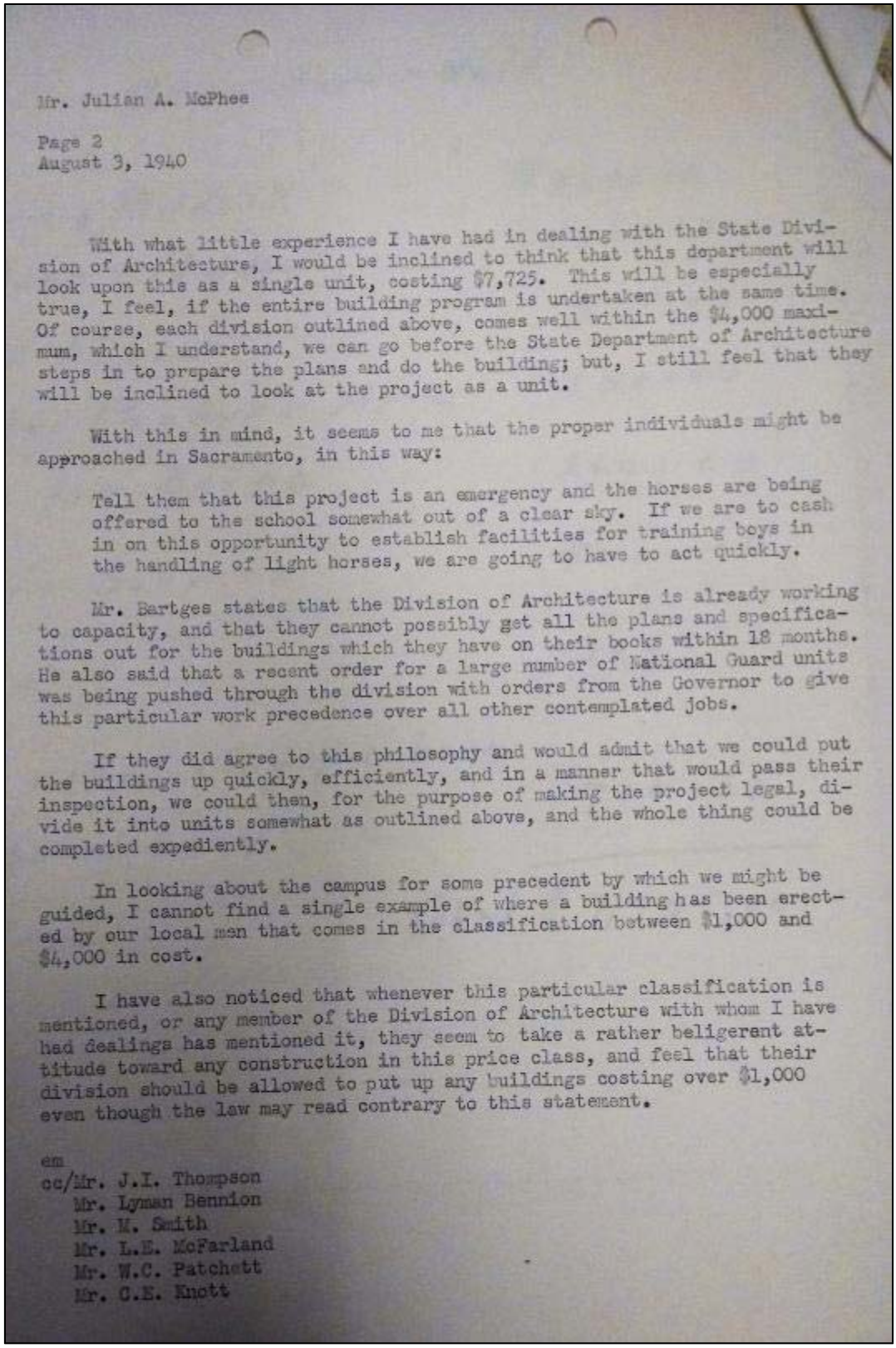
FROM Mr. Eugene Boone

SUBJECT Horse Barns

Since being called in two days ago on the problem of getting adequate barns and paddocks for the thoroughbred horses, I have had an opportunity not to talk with Messrs. Thompson, Knott, Smith and McFarland. Time has permitted a very thorough study of this particular problem, but the following, on snap judgement, seems to be about as close as I might come to a solution:

Mr. Smith estimates that the mare barn and its paddocks will cost	$ 3,200
The stallion barn and paddocks.	1,600
(Note: The above two figures include only the concrete and woodwork, labor, paint and hardware for these units)	
The pasture fence complete	575
Pipe line from the water reservoir to irrigate pasture area	650
(Note: Mr. Thompson feels that a 3" line will be necessary in order to provide sufficient water for any extensive irrigating. Mr. McFarland, however, has figured only a 2" line, starting from the reservoir, and being reduced to a final size of 1" at the extreme west end of the pasture.)	
To provide water service for the barns	200
Electrical services	500
The lavatory facilities, including electric hot water heater and septic tank.	300
To level the area, providing a clay fill for the ~~barn~~ Stalls. ~~Annex~~, and to gravel the lot and parking area	700
TOTAL	$7,725

Figure 9.



Mr. Julian A. McPhee

Page 2
August 3, 1940

With what little experience I have had in dealing with the State Division of Architecture, I would be inclined to think that this department will look upon this as a single unit, costing $7,725. This will be especially true, I feel, if the entire building program is undertaken at the same time. Of course, each division outlined above, comes well within the $4,000 maximum, which I understand, we can go before the State Department of Architecture steps in to prepare the plans and do the building; but, I still feel that they will be inclined to look at the project as a unit.

With this in mind, it seems to me that the proper individuals might be approached in Sacramento, in this way:

Tell them that this project is an emergency and the horses are being offered to the school somewhat out of a clear sky. If we are to cash in on this opportunity to establish facilities for training boys in the handling of light horses, we are going to have to act quickly.

Mr. Bartges states that the Division of Architecture is already working to capacity, and that they cannot possibly get all the plans and specifications out for the buildings which they have on their books within 18 months. He also said that a recent order for a large number of National Guard units was being pushed through the division with orders from the Governor to give this particular work precedence over all other contemplated jobs.

If they did agree to this philosophy and would admit that we could put the buildings up quickly, efficiently, and in a manner that would pass their inspection, we could then, for the purpose of making the project legal, divide it into units somewhat as outlined above, and the whole thing could be completed expediently.

In looking about the campus for some precedent by which we might be guided, I cannot find a single example of where a building has been erected by our local men that comes in the classification between $1,000 and $4,000 in cost.

I have also noticed that whenever this particular classification is mentioned, or any member of the Division of Architecture with whom I have had dealings has mentioned it, they seem to take a rather beligerent attitude toward any construction in this price class, and feel that their division should be allowed to put up any buildings costing over $1,000 even though the law may read contrary to this statement.

em
cc/Mr. J.I. Thompson
Mr. Lyman Bennion
Mr. M. Smith
Mr. L.E. McFarland
Mr. W.C. Patchett
Mr. C.E. Knott

Figure 10.

P
Y

August 12, 1940

Mr. Walter T. Wells
5610 South Soto Street
Los Angeles, California

Dear Mr. Wells:

This is the first opportunity I have had to write to you since returning to San Luis Obispo. I certainly enjoyed our luncheon on Monday of last week and want to again thank you for your many kindnesses.

On returning to my hotel on Monday, I sent word to have a copy of the deed to the Voorhis unit mailed to you and trust that you have received it.

We are very appreciative of the four volumes on the early history of thoroughbred horses. These books will be an asset to our thoroughbred breeding program here at the school.

I have secured permission from the State Department of Finance and the Department of Architecture to go ahead with our building plans for the thoroughbred breeding unit. It looks as though we can have this unit completed within the next month.

Again assuring you of my interest in the subjects we discussed on Monday, and also of my appreciation of any further information you may give us regarding the matter,

Very sincerely yours,

President, California
Polytechnic School

cc/ Thompson
Patchett
Bennion
Boone

Figure 11.

George

Mr. Killion:

You will recall that I promised you I would write you a detailed explanation of the proposed thoroughbred horse breeding project which we have been asked to establish here at the California Polytechnic School. I will try to give you a few of the highlights in the development of this thing in order to make it clear to you why we are in such a hurry.

At the time of our annual Poly Royal open house day here last spring, April 27, Mr. John J. Knezevich of the Hollywood Turf Club spent the day with us and seemed to be quite favorably impressed with the work that we are doing here at this institution. He remarked that since so many of the boys were interested in stock or cow horses, perhaps we should have some thoroughbred mares so that we might make our horse production course comparable to the work being given in beef, sheep, and hog production. I agreed that was true, but stated that present funds would not warrant the investment at this time. Then I proceeded to forget all about it. Apparently Mr. Knezevich had not forgotten, for on about June 27, he phoned to me that a committee of thoroughbred breeders had been selected to develop this project and that some of them would visit this institution on June 29 to discuss the establishment of a thoroughbred breeding unit here. He advised me that the committee was as follows:

Charles E. Perkins, Chairman, P.O. Box 690, Santa Barbara

Charles E. Cooper, Rancho San Luis Rey, Bonsall, Calif.

Walter J. Hoffmann, Jr., P.O. Box 1090, Ventura, Calif.

Senator D. J. Metzger, Red Bluff, California

Harry S. Hart, Marwyck Ranch, Northridge, California

Carleton F. Burke, 808 So. Broadway, Los Angeles, Calif.

Edwin Janns, Jr., Conejo Ranch, Camarillo, California

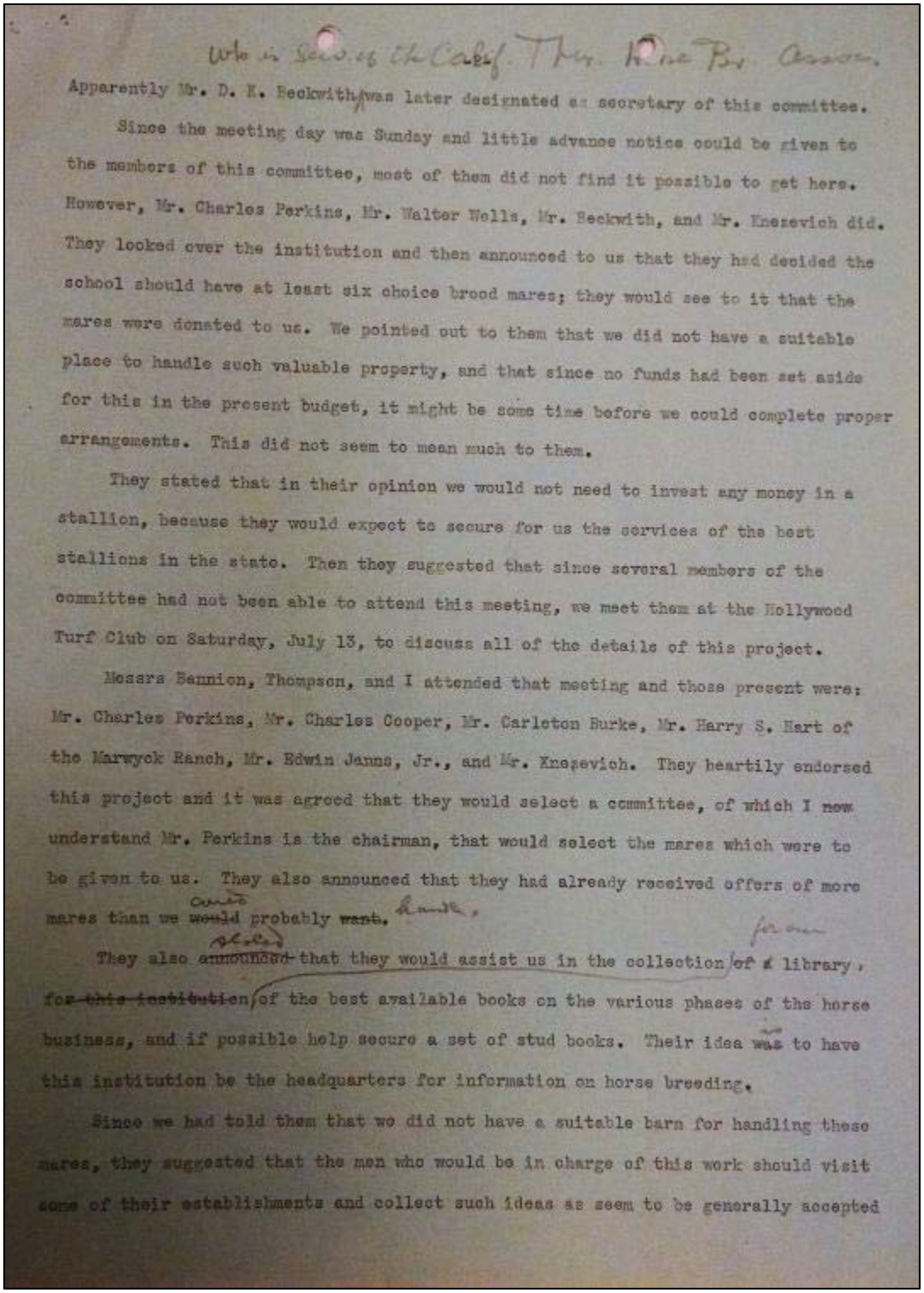
Henry P. Russell, P.O. Drawer T.T., Carmel, California

Walter T. Wells, 5610 So. Soto Street, Los Angeles, Calif.

Bing Crosby, 10500 Camarillo, No. Hollywood, California

John J. Knezevich, Hollywood Turf Club, Inglewood, Calif.

Figure 12.



Who is Secy. of the Calif. Thor. Race Bd. Assoc.

Apparently Mr. D. K. Beckwith was later designated as secretary of this committee.

Since the meeting day was Sunday and little advance notice could be given to the members of this committee, most of them did not find it possible to get here. However, Mr. Charles Perkins, Mr. Walter Wells, Mr. Beckwith, and Mr. Knezevich did. They looked over the institution and then announced to us that they had decided the school should have at least six choice brood mares; they would see to it that the mares were donated to us. We pointed out to them that we did not have a suitable place to handle such valuable property, and that since no funds had been set aside for this in the present budget, it might be some time before we could complete proper arrangements. This did not seem to mean much to them.

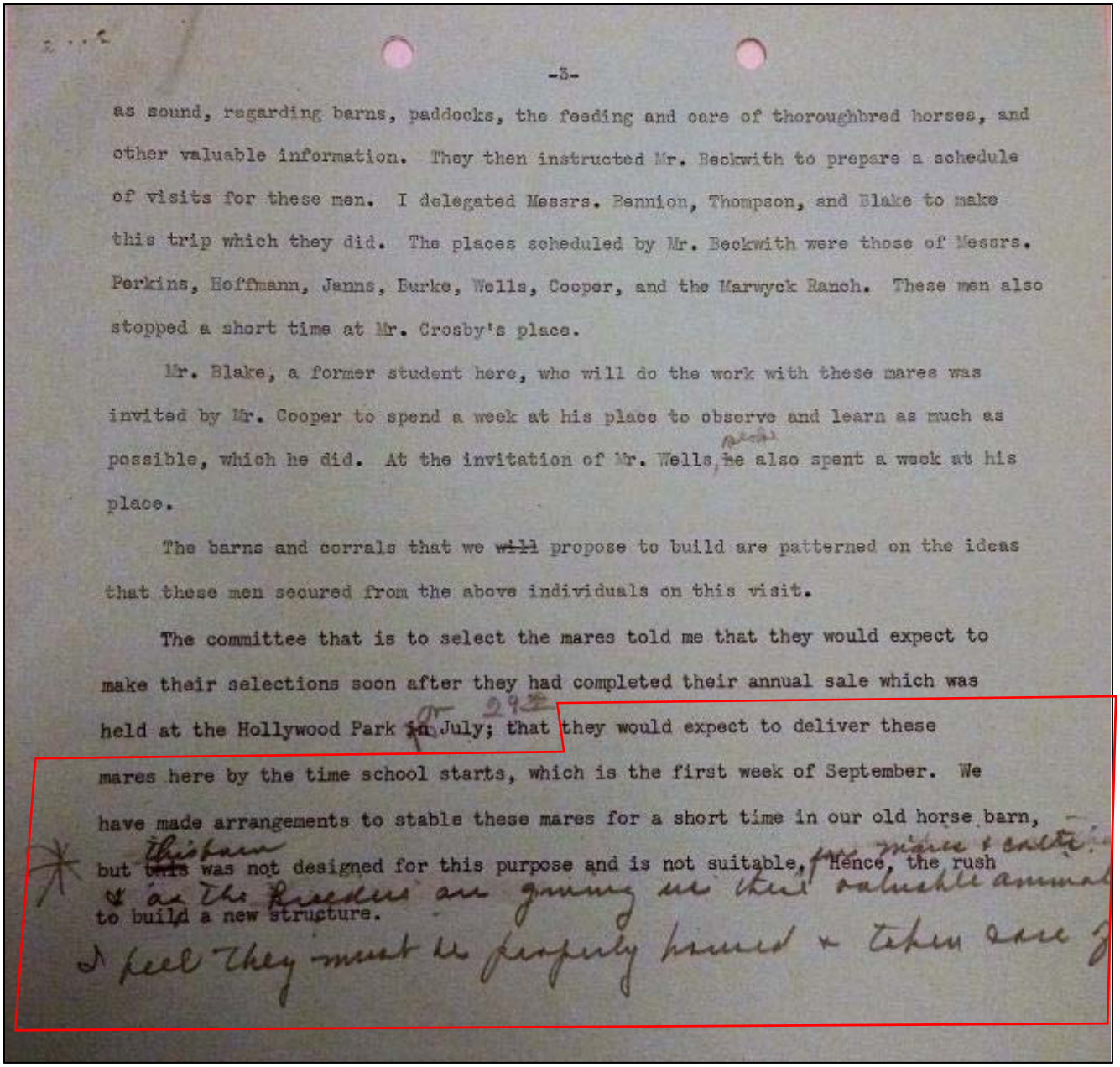
They stated that in their opinion we would not need to invest any money in a stallion, because they would expect to secure for us the services of the best stallions in the state. Then they suggested that since several members of the committee had not been able to attend this meeting, we meet them at the Hollywood Turf Club on Saturday, July 13, to discuss all of the details of this project.

Messrs Bennion, Thompson, and I attended that meeting and those present were: Mr. Charles Perkins, Mr. Charles Cooper, Mr. Carleton Burke, Mr. Harry S. Hart of the Marwyck Ranch, Mr. Edwin Janss, Jr., and Mr. Knezevich. They heartily endorsed this project and it was agreed that they would select a committee, of which I now understand Mr. Perkins is the chairman, that would select the mares which were to be given to us. They also announced that they had already received offers of more mares than we ~~would~~ could probably ~~want~~ handle,

They also ~~announced~~ agreed that they would assist us in the collection for a library, ~~for this institution~~ of the best available books on the various phases of the horse business, and if possible help secure a set of stud books. Their idea was to have this institution be the headquarters for information on horse breeding.

Since we had told them that we did not have a suitable barn for handling these mares, they suggested that the men who would be in charge of this work should visit some of their establishments and collect such ideas as seem to be generally accepted

Figure 13.



-3-

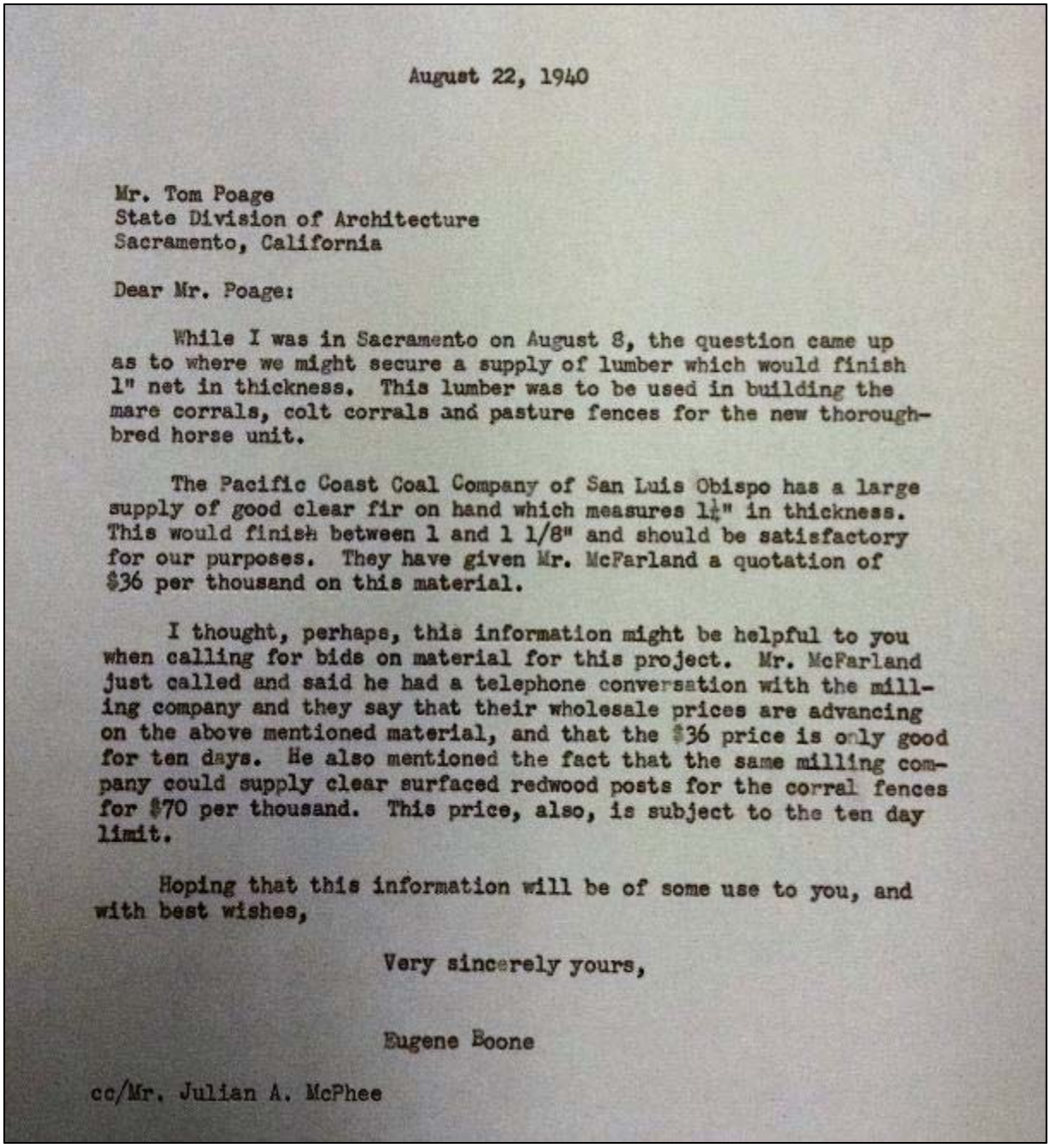
as sound, regarding barns, paddocks, the feeding and care of thoroughbred horses, and other valuable information. They then instructed Mr. Beckwith to prepare a schedule of visits for these men. I delegated Messrs. Bennion, Thompson, and Blake to make this trip which they did. The places scheduled by Mr. Beckwith were those of Messrs. Perkins, Hoffmann, Janns, Burke, Wells, Cooper, and the Marwyck Ranch. These men also stopped a short time at Mr. Crosby's place.

Mr. Blake, a former student here, who will do the work with these mares was invited by Mr. Cooper to spend a week at his place to observe and learn as much as possible, which he did. At the invitation of Mr. Wells, he also spent a week at his place.

The barns and corrals that we ~~will~~ propose to build are patterned on the ideas that these men secured from the above individuals on this visit.

The committee that is to select the mares told me that they would expect to make their selections soon after they had completed their annual sale which was held at the Hollywood Park in July; that they would expect to deliver these mares here by the time school starts, which is the first week of September. We have made arrangements to stable these mares for a short time in our old horse barn, but this barn was not designed for this purpose and is not suitable. Hence, the rush to build a new structure.

Figure 14.



August 22, 1940

Mr. Tom Poage
State Division of Architecture
Sacramento, California

Dear Mr. Poage:

While I was in Sacramento on August 8, the question came up as to where we might secure a supply of lumber which would finish 1" net in thickness. This lumber was to be used in building the mare corrals, colt corrals and pasture fences for the new thoroughbred horse unit.

The Pacific Coast Coal Company of San Luis Obispo has a large supply of good clear fir on hand which measures 1¼" in thickness. This would finish between 1 and 1 1/8" and should be satisfactory for our purposes. They have given Mr. McFarland a quotation of $36 per thousand on this material.

I thought, perhaps, this information might be helpful to you when calling for bids on material for this project. Mr. McFarland just called and said he had a telephone conversation with the milling company and they say that their wholesale prices are advancing on the above mentioned material, and that the $36 price is only good for ten days. He also mentioned the fact that the same milling company could supply clear surfaced redwood posts for the corral fences for $70 per thousand. This price, also, is subject to the ten day limit.

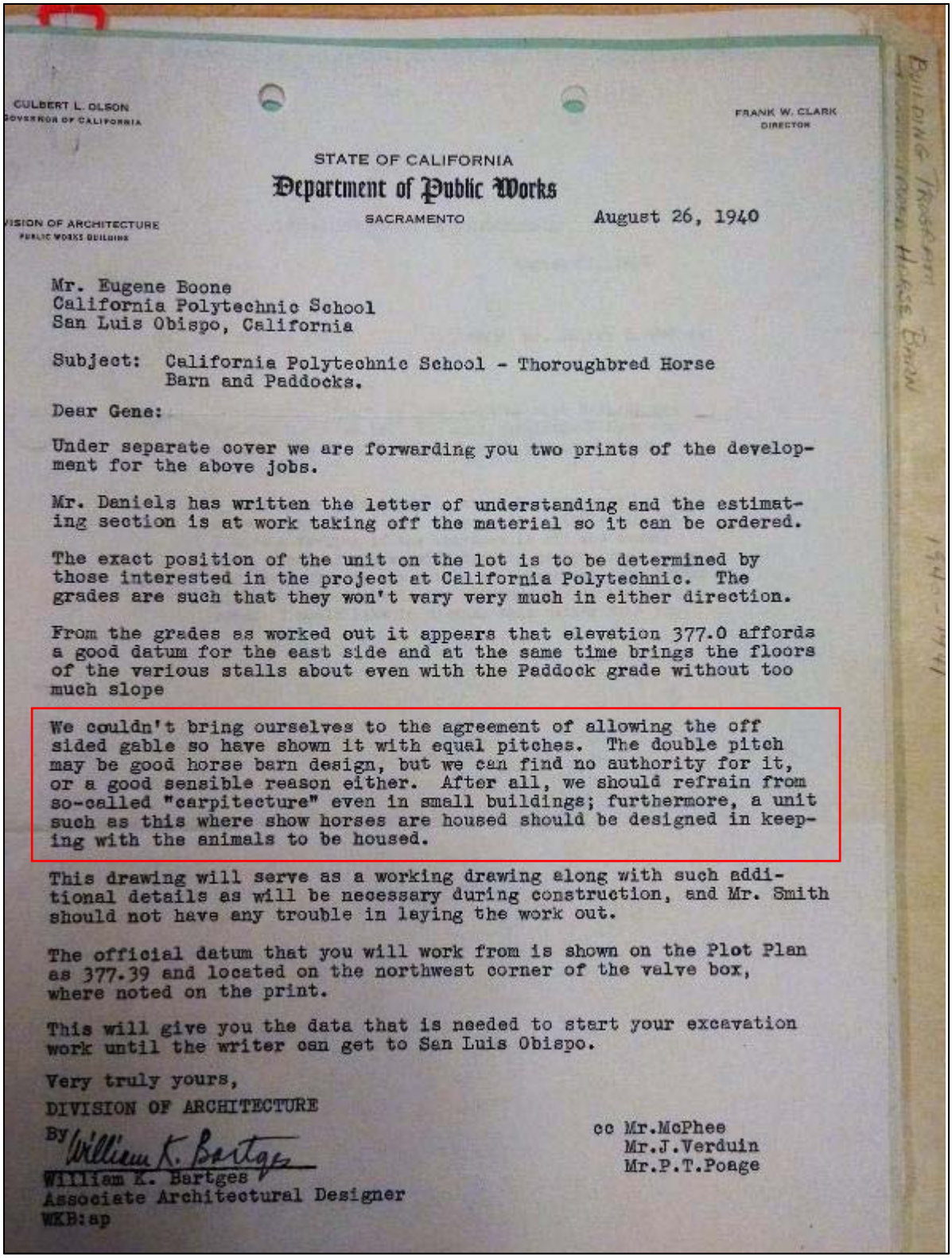
Hoping that this information will be of some use to you, and with best wishes,

Very sincerely yours,

Eugene Boone

cc/Mr. Julian A. McPhee

Figure 15.



CULBERT L. OLSON
GOVERNOR OF CALIFORNIA

FRANK W. CLARK
DIRECTOR

STATE OF CALIFORNIA
Department of Public Works
SACRAMENTO

VISION OF ARCHITECTURE
PUBLIC WORKS BUILDING

August 26, 1940

Mr. Eugene Boone
California Polytechnic School
San Luis Obispo, California

Subject: California Polytechnic School - Thoroughbred Horse Barn and Paddocks.

Dear Gene:

Under separate cover we are forwarding you two prints of the development for the above jobs.

Mr. Daniels has written the letter of understanding and the estimating section is at work taking off the material so it can be ordered.

The exact position of the unit on the lot is to be determined by those interested in the project at California Polytechnic. The grades are such that they won't vary very much in either direction.

From the grades as worked out it appears that elevation 377.0 affords a good datum for the east side and at the same time brings the floors of the various stalls about even with the Paddock grade without too much slope

We couldn't bring ourselves to the agreement of allowing the off sided gable so have shown it with equal pitches. The double pitch may be good horse barn design, but we can find no authority for it, or a good sensible reason either. After all, we should refrain from so-called "carpitecture" even in small buildings; furthermore, a unit such as this where show horses are housed should be designed in keeping with the animals to be housed.

This drawing will serve as a working drawing along with such additional details as will be necessary during construction, and Mr. Smith should not have any trouble in laying the work out.

The official datum that you will work from is shown on the Plot Plan as 377.39 and located on the northwest corner of the valve box, where noted on the print.

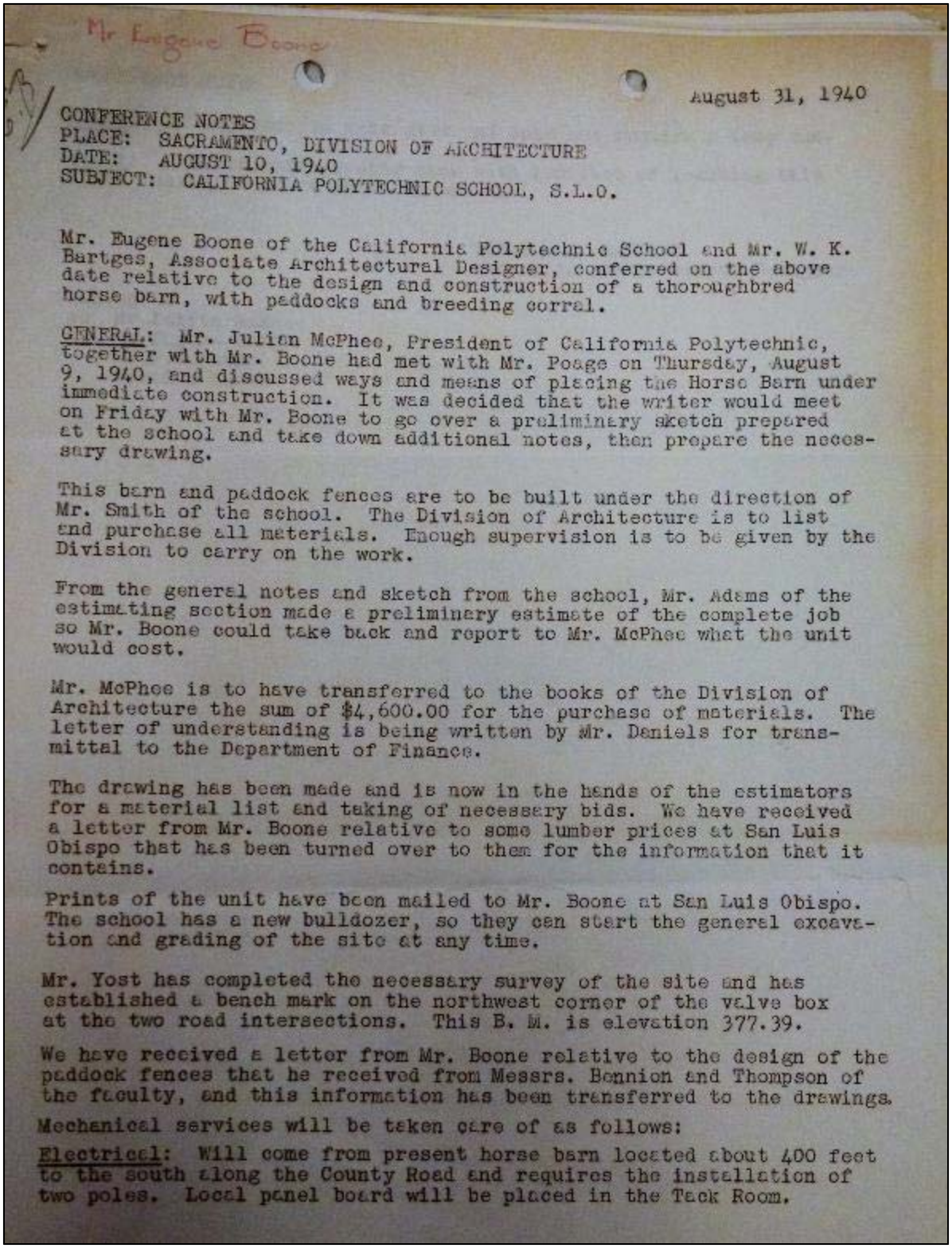
This will give you the data that is needed to start your excavation work until the writer can get to San Luis Obispo.

Very truly yours,
DIVISION OF ARCHITECTURE

By William K. Bartges
William K. Bartges
Associate Architectural Designer
WKB:ap

cc Mr.McPhee
Mr.J.Verduin
Mr.P.T.Poage

Figure 16.



Mr Eugene Boone

August 31, 1940

CONFERENCE NOTES
PLACE: SACRAMENTO, DIVISION OF ARCHITECTURE
DATE: AUGUST 10, 1940
SUBJECT: CALIFORNIA POLYTECHNIC SCHOOL, S.L.O.

Mr. Eugene Boone of the California Polytechnic School and Mr. W. K. Bartges, Associate Architectural Designer, conferred on the above date relative to the design and construction of a thoroughbred horse barn, with paddocks and breeding corral.

GENERAL: Mr. Julian McPhee, President of California Polytechnic, together with Mr. Boone had met with Mr. Poage on Thursday, August 9, 1940, and discussed ways and means of placing the Horse Barn under immediate construction. It was decided that the writer would meet on Friday with Mr. Boone to go over a preliminary sketch prepared at the school and take down additional notes, then prepare the necessary drawing.

This barn and paddock fences are to be built under the direction of Mr. Smith of the school. The Division of Architecture is to list and purchase all materials. Enough supervision is to be given by the Division to carry on the work.

From the general notes and sketch from the school, Mr. Adams of the estimating section made a preliminary estimate of the complete job so Mr. Boone could take back and report to Mr. McPhee what the unit would cost.

Mr. McPhee is to have transferred to the books of the Division of Architecture the sum of $4,600.00 for the purchase of materials. The letter of understanding is being written by Mr. Daniels for transmittal to the Department of Finance.

The drawing has been made and is now in the hands of the estimators for a material list and taking of necessary bids. We have received a letter from Mr. Boone relative to some lumber prices at San Luis Obispo that has been turned over to them for the information that it contains.

Prints of the unit have been mailed to Mr. Boone at San Luis Obispo. The school has a new bulldozer, so they can start the general excavation and grading of the site at any time.

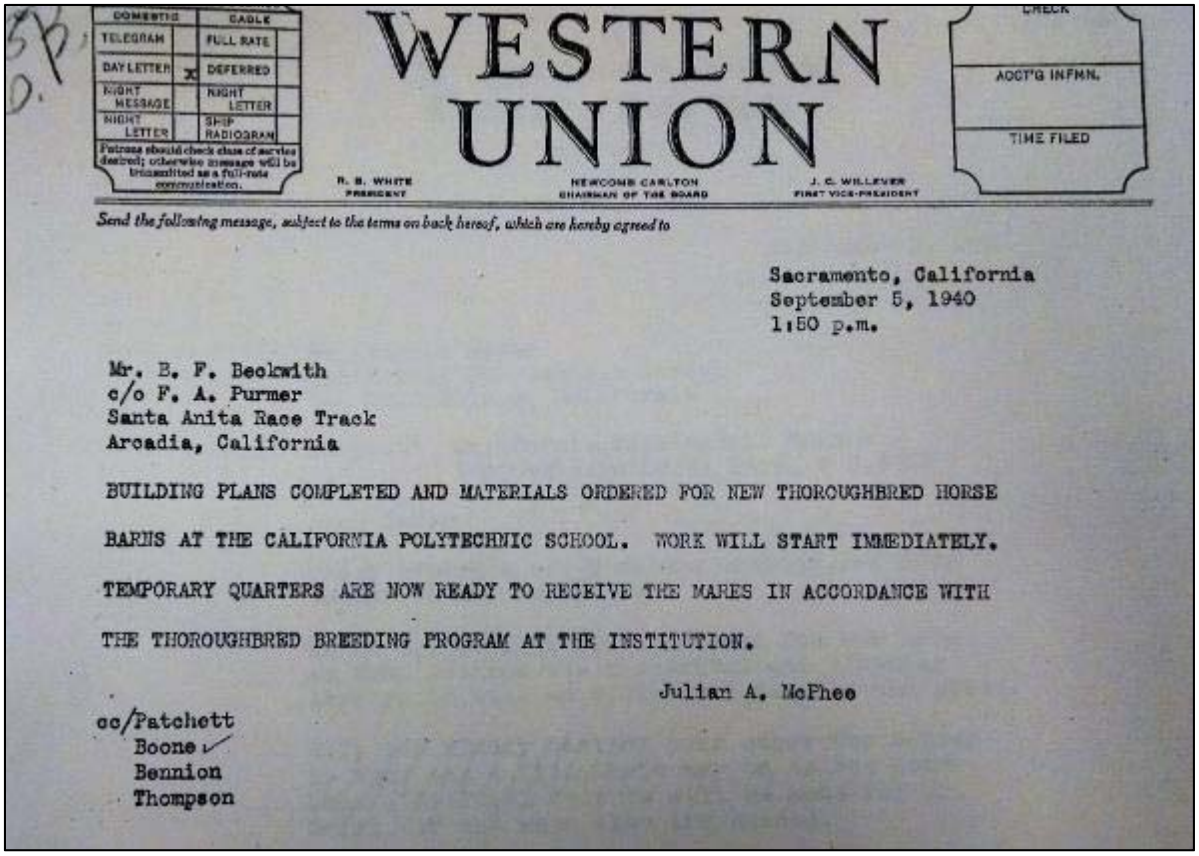
Mr. Yost has completed the necessary survey of the site and has established a bench mark on the northwest corner of the valve box at the two road intersections. This B. M. is elevation 377.39.

We have received a letter from Mr. Boone relative to the design of the paddock fences that he received from Messrs. Bennion and Thompson of the faculty, and this information has been transferred to the drawings.

Mechanical services will be taken care of as follows:

Electrical: Will come from present horse barn located about 400 feet to the south along the County Road and requires the installation of two poles. Local panel board will be placed in the Tack Room.

Figure 17.



WESTERN UNION

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NIGHT MESSAGE		NIGHT LETTER	
NIGHT LETTER		SHIP RADIOGRAM	

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R. B. WHITE, PRESIDENT — NEWCOMB CARLTON, CHAIRMAN OF THE BOARD — J. C. WILLEVER, FIRST VICE-PRESIDENT

CHECK

ACCT'G INFMN.

TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Sacramento, California
September 5, 1940
1:50 p.m.

Mr. B. F. Beckwith
c/o F. A. Purmer
Santa Anita Race Track
Arcadia, California

BUILDING PLANS COMPLETED AND MATERIALS ORDERED FOR NEW THOROUGHBRED HORSE BARNS AT THE CALIFORNIA POLYTECHNIC SCHOOL. WORK WILL START IMMEDIATELY. TEMPORARY QUARTERS ARE NOW READY TO RECEIVE THE MARES IN ACCORDANCE WITH THE THOROUGHBRED BREEDING PROGRAM AT THE INSTITUTION.

Julian A. McPhee

cc/Patchett
Boone ✓
Bennion
Thompson

Figure 18.

INTRA DEPARTMENT CORRESPONDENCE

TO Mr. Julian A. McPhee September 6, 1940

FROM Mr. Eugene Boone

SUBJECT Horse Barn Conference with Mr. Bartges

On Tuesday September 3, a conference was held in Mr. McPhee's office between him, Mr. Bartges and the writer relative to the thoroughbred horse barn. The following points were discussed:

1. Payment of the Building

Mr. Bartges stated that $4,600 had been tentatively set up on the books of the State Division of Architecture, to cover architect's and engineering fees, and the cost of materials in connection with the above mentioned project. Clearance had not been given by the State Department of Finance, but in spite of this fact, Mr. Wes Daniels had called for bids on the lumber, certain of the hardware, cement and sand, and a portion of the electrical equipment for this unit. Mr. McPhee stated that he would check with the Department of Finance while in Sacramento on Wednesday, September 4, in order to get this matter cleared up.

2. Location of the Building

Mr. Bartges has tentatively located this building 40 feet west of the west gutter of the county road extending along the eastern side of the campus. The building is to parallel the above mentioned road. This location corresponds rather closely with that suggested by Messrs. Thompson and Bennion in which they stated that the building should be located approximately 30 feet west of the nearest eucalyptus trees along the county road. However, Messrs. Thompson and Bennion felt it would perhaps be better to place this building, not parallel to the county road, but at right angles to the school road bordering the horse paddock on the south.

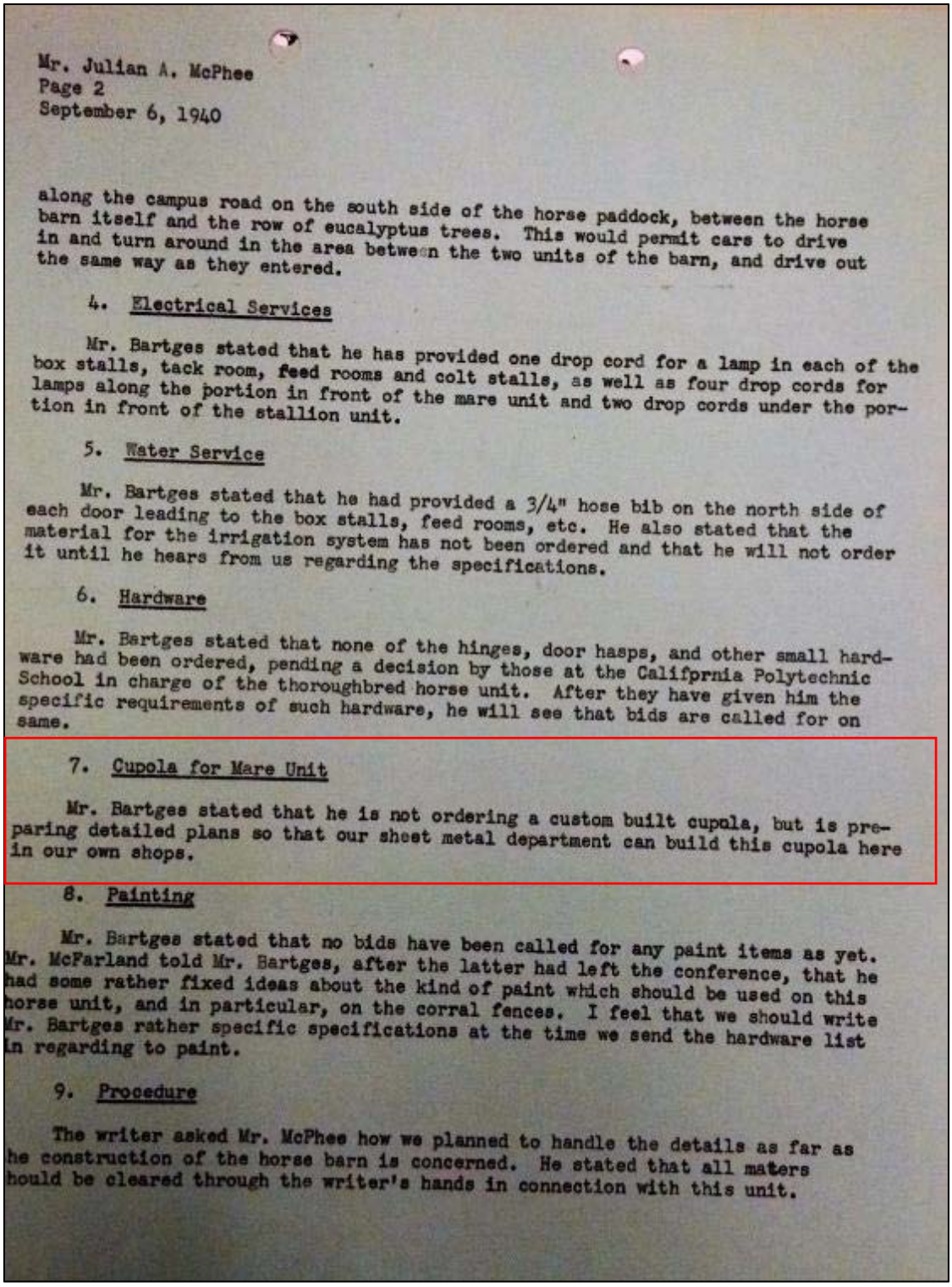
Mr. Bartges, however, feels that since the horse barn is so long, and so narrow, it would look much better to place the building as he has suggested. The matter was left in the following form:

> We are to locate the building on this piece of ground, in a suitable spot keeping in mind the suggestions as given by Mr. Bartges.

3. Entrance to the Thoroughbred Horse Barn

Mr. McPhee and Mr. Bartges both expressed the thought that it would be unwise to remove any of the eucalyptus trees along the county road in order to provide an entrance from the east. They also suggested that an entrance should be provided

Figure 19.



Mr. Julian A. McPhee
Page 2
September 6, 1940

along the campus road on the south side of the horse paddock, between the horse barn itself and the row of eucalyptus trees. This would permit cars to drive in and turn around in the area between the two units of the barn, and drive out the same way as they entered.

4. Electrical Services

Mr. Bartges stated that he has provided one drop cord for a lamp in each of the box stalls, tack room, feed rooms and colt stalls, as well as four drop cords for lamps along the portion in front of the mare unit and two drop cords under the portion in front of the stallion unit.

5. Water Service

Mr. Bartges stated that he had provided a 3/4" hose bib on the north side of each door leading to the box stalls, feed rooms, etc. He also stated that the material for the irrigation system has not been ordered and that he will not order it until he hears from us regarding the specifications.

6. Hardware

Mr. Bartges stated that none of the hinges, door hasps, and other small hardware had been ordered, pending a decision by those at the Califprnia Polytechnic School in charge of the thoroughbred horse unit. After they have given him the specific requirements of such hardware, he will see that bids are called for on same.

7. Cupola for Mare Unit

Mr. Bartges stated that he is not ordering a custom built cupola, but is preparing detailed plans so that our sheet metal department can build this cupola here in our own shops.

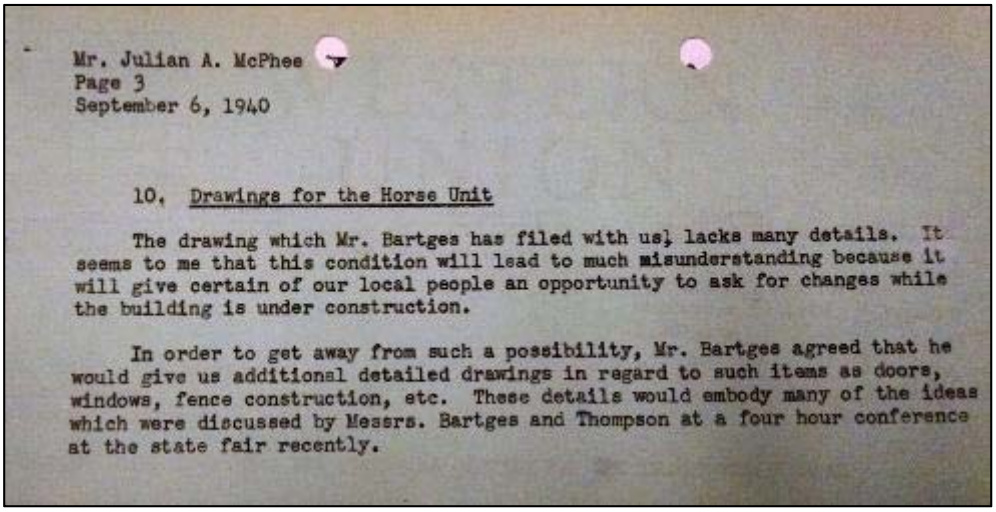
8. Painting

Mr. Bartges stated that no bids have been called for any paint items as yet. Mr. McFarland told Mr. Bartges, after the latter had left the conference, that he had some rather fixed ideas about the kind of paint which should be used on this horse unit, and in particular, on the corral fences. I feel that we should write Mr. Bartges rather specific specifications at the time we send the hardware list in regarding to paint.

9. Procedure

The writer asked Mr. McPhee how we planned to handle the details as far as he construction of the horse barn is concerned. He stated that all maters hould be cleared through the writer's hands in connection with this unit.

Figure 20.



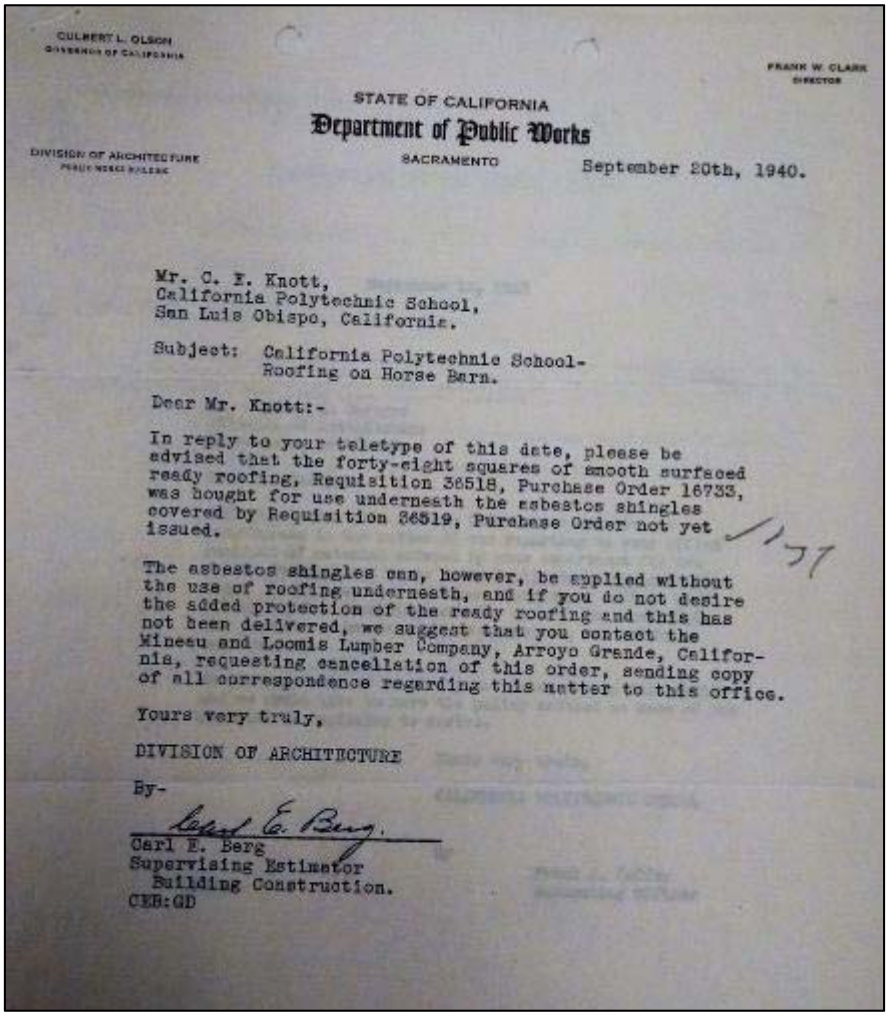
Mr. Julian A. McPhee
Page 3
September 6, 1940

10. Drawings for the Horse Unit

The drawing which Mr. Bartges has filed with us lacks many details. It seems to me that this condition will lead to much misunderstanding because it will give certain of our local people an opportunity to ask for changes while the building is under construction.

In order to get away from such a possibility, Mr. Bartges agreed that he would give us additional detailed drawings in regard to such items as doors, windows, fence construction, etc. These details would embody many of the ideas which were discussed by Messrs. Bartges and Thompson at a four hour conference at the state fair recently.

Figure 21.



CULBERT L. OLSON
Governor of California

FRANK W. CLARK
Director

STATE OF CALIFORNIA
Department of Public Works
SACRAMENTO

DIVISION OF ARCHITECTURE
Public Works Building

September 20th, 1940.

Mr. C. F. Knott,
California Polytechnic School,
San Luis Obispo, California.

Subject: California Polytechnic School-
Roofing on Horse Barn.

Dear Mr. Knott:-

In reply to your teletype of this date, please be advised that the forty-eight squares of smooth surfaced ready roofing, Requisition 38518, Purchase Order 16733, was bought for use underneath the asbestos shingles covered by Requisition 38519, Purchase Order not yet issued.

The asbestos shingles can, however, be applied without the use of roofing underneath, and if you do not desire the added protection of the ready roofing and this has not been delivered, we suggest that you contact the Mineau and Loomis Lumber Company, Arroyo Grande, California, requesting cancellation of this order, sending copy of all correspondence regarding this matter to this office.

Yours very truly,

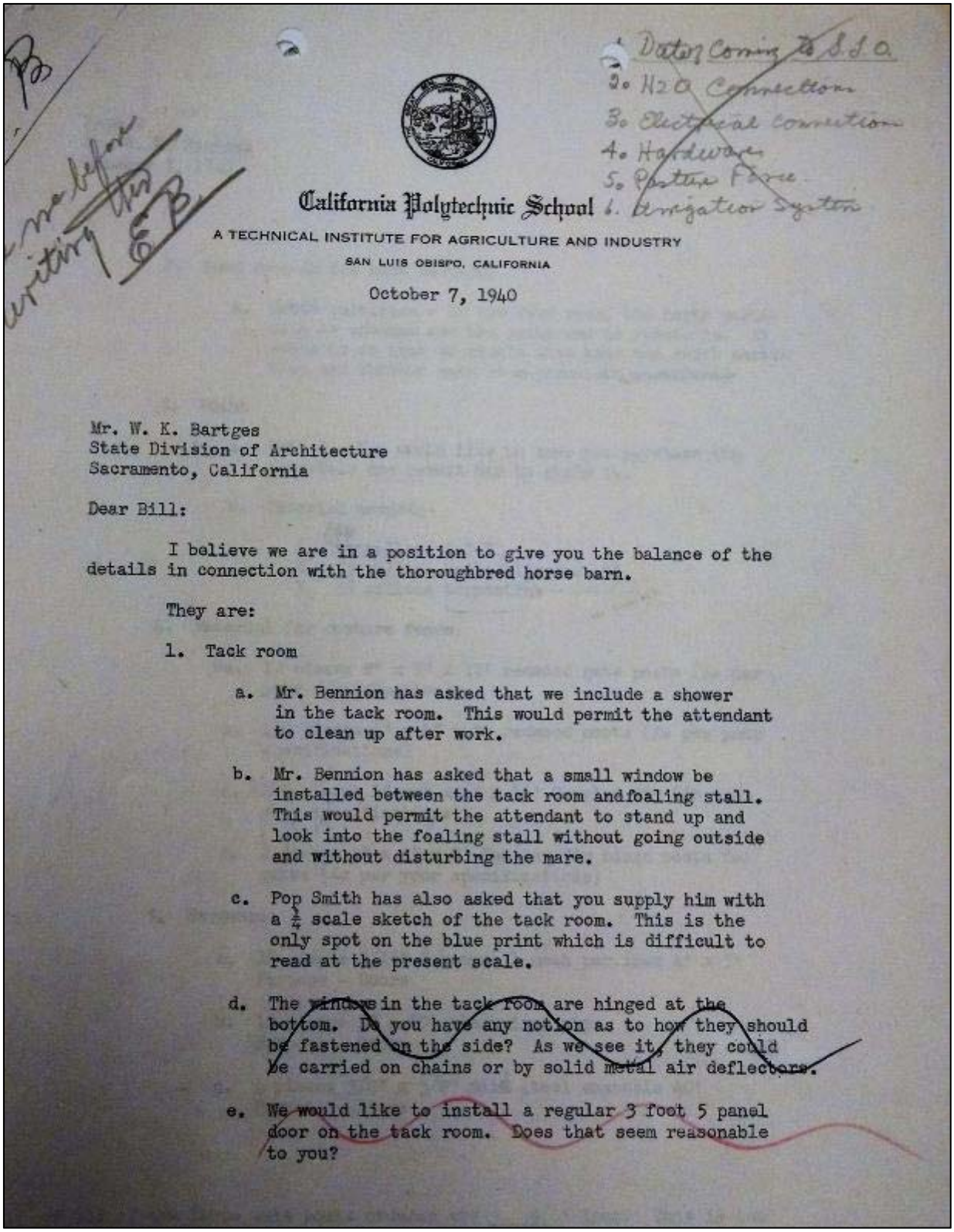
DIVISION OF ARCHITECTURE

By-

Carl E. Berg

Carl E. Berg
Supervising Estimator
Building Construction.
CEB:GD

Figure 22. Original roofing material consisted of rolled composition underlayment and rigid asbestos shingles.



California Polytechnic School

A TECHNICAL INSTITUTE FOR AGRICULTURE AND INDUSTRY

SAN LUIS OBISPO, CALIFORNIA

October 7, 1940

Mr. W. K. Bartges
State Division of Architecture
Sacramento, California

Dear Bill:

I believe we are in a position to give you the balance of the details in connection with the thoroughbred horse barn.

They are:

1. Tack room

   a. Mr. Bennion has asked that we include a shower in the tack room. This would permit the attendant to clean up after work.

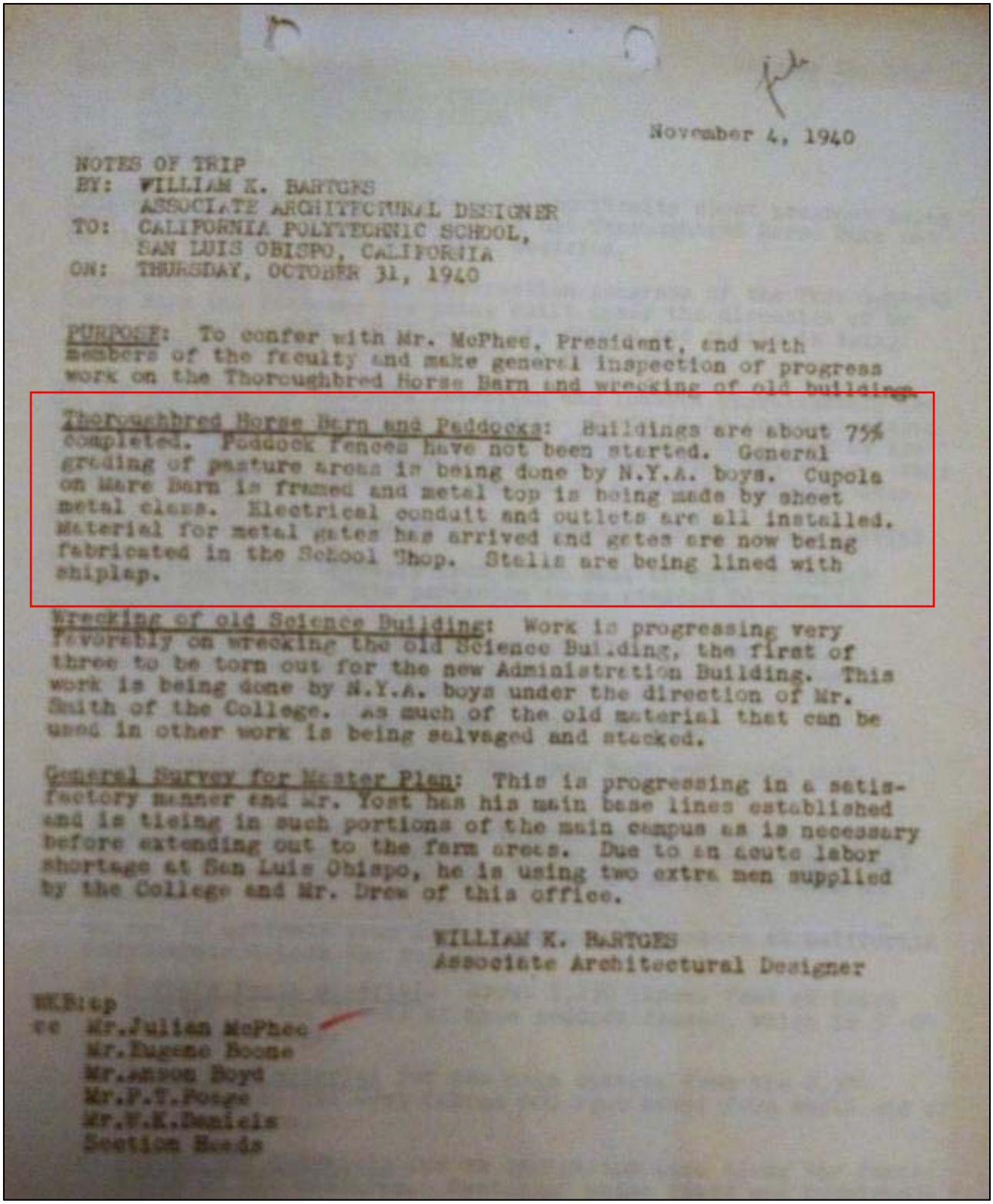
   b. Mr. Bennion has asked that a small window be installed between the tack room andfoaling stall. This would permit the attendant to stand up and look into the foaling stall without going outside and without disturbing the mare.

   c. Pop Smith has also asked that you supply him with a ¼ scale sketch of the tack room. This is the only spot on the blue print which is difficult to read at the present scale.

   d. The windows in the tack room are hinged at the bottom. Do you have any notion as to how they should be fastened on the side? As we see it, they could be carried on chains or by solid metal air deflectors.

   e. We would like to install a regular 3 foot 5 panel door on the tack room. Does that seem reasonable to you?

Figure 23.



November 4, 1940

NOTES OF TRIP
BY: WILLIAM K. BARTGES
ASSOCIATE ARCHITECTURAL DESIGNER
TO: CALIFORNIA POLYTECHNIC SCHOOL,
SAN LUIS OBISPO, CALIFORNIA
ON: THURSDAY, OCTOBER 31, 1940

PURPOSE: To confer with Mr. McPhee, President, and with members of the faculty and make general inspection of progress work on the Thoroughbred Horse Barn and wrecking of old buildings.

Thoroughbred Horse Barn and Paddocks: Buildings are about 75% completed. Paddock fences have not been started. General grading of pasture areas is being done by N.Y.A. boys. Cupola on Mare Barn is framed and metal top is being made by sheet metal class. Electrical conduit and outlets are all installed. Material for metal gates has arrived and gates are now being fabricated in the School Shop. Stalls are being lined with shiplap.

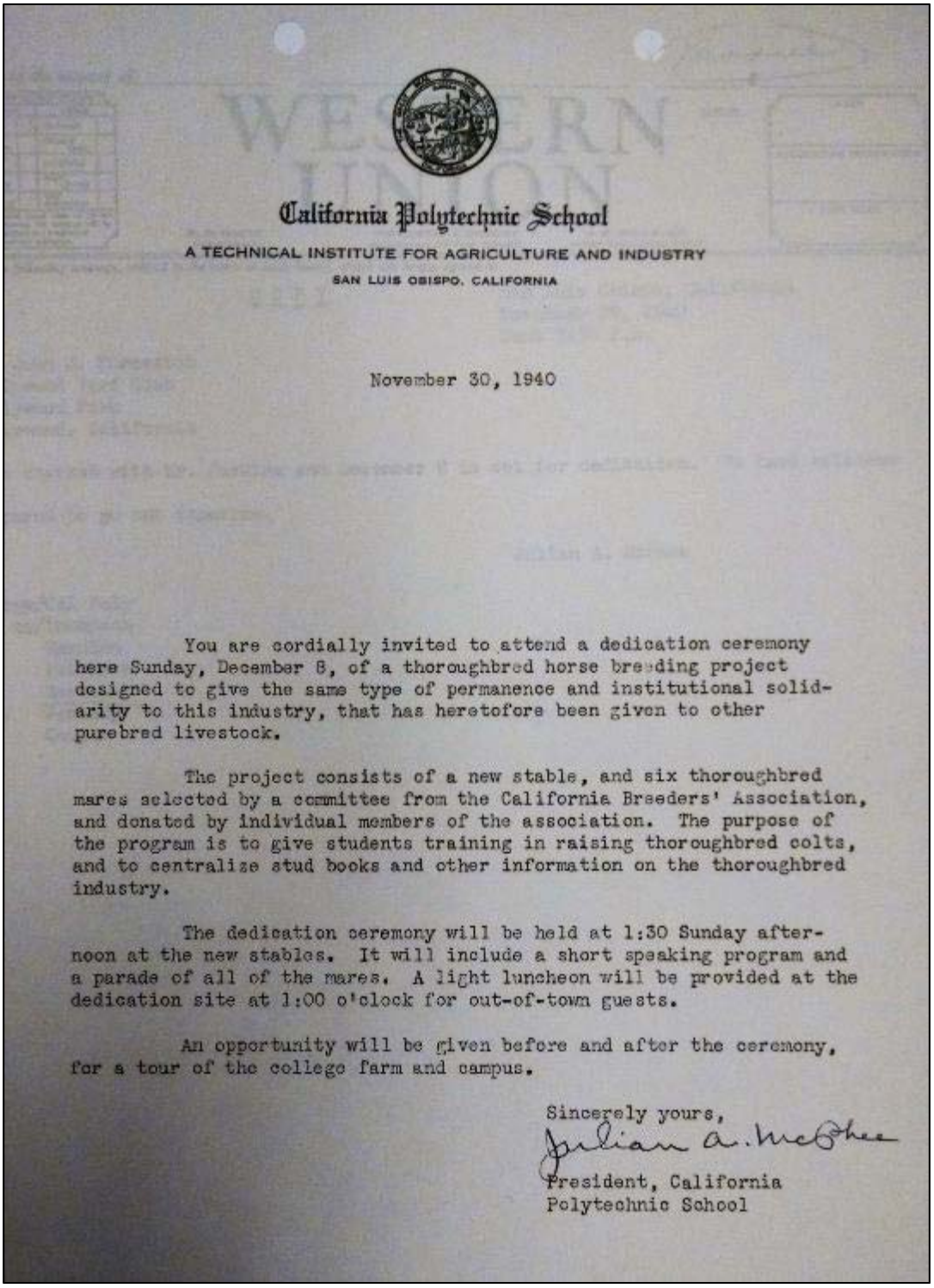
Wrecking of old Science Building: Work is progressing very favorably on wrecking the old Science Building, the first of three to be torn out for the new Administration Building. This work is being done by N.Y.A. boys under the direction of Mr. Smith of the College. As much of the old material that can be used in other work is being salvaged and stacked.

General Survey for Master Plan: This is progressing in a satisfactory manner and Mr. Yost has his main base lines established and is tieing in such portions of the main campus as is necessary before extending out to the farm areas. Due to an acute labor shortage at San Luis Obispo, he is using two extra men supplied by the College and Mr. Drew of this office.

WILLIAM K. BARTGES
Associate Architectural Designer

WKB:sp
cc Mr.Julian McPhee
Mr.Eugene Boone
Mr.Anson Boyd
Mr.P.T.Poage
Mr.W.K.Daniels
Section Heads

Figure 24. The Thoroughbred Horse Barns were nearing completion in early November 1940. Metalwork for the Mare Barn cupola and metal gates was being done by the School Metal Shop. Note that National Youth Authority (N.Y.A.) labor was also being used on the Thoroughbred pastures.



California Polytechnic School

A TECHNICAL INSTITUTE FOR AGRICULTURE AND INDUSTRY

SAN LUIS OBISPO, CALIFORNIA

November 30, 1940

You are cordially invited to attend a dedication ceremony here Sunday, December 8, of a thoroughbred horse breeding project designed to give the same type of permanence and institutional solidarity to this industry, that has heretofore been given to other purebred livestock.

The project consists of a new stable, and six thoroughbred mares selected by a committee from the California Breeders' Association, and donated by individual members of the association. The purpose of the program is to give students training in raising thoroughbred colts, and to centralize stud books and other information on the thoroughbred industry.

The dedication ceremony will be held at 1:30 Sunday afternoon at the new stables. It will include a short speaking program and a parade of all of the mares. A light luncheon will be provided at the dedication site at 1:00 o'clock for out-of-town guests.

An opportunity will be given before and after the ceremony, for a tour of the college farm and campus.

Sincerely yours,

Julian A. McPhee

President, California
Polytechnic School

Figure 25. President McPhee's invitation to the December 8, 1940, dedication of the Thoroughbred Horse Breeding project.

RESOURCES THAT MEET THE ELIGIBILITY CRITERIA FOR LISTING IN THE CALIFORNIA REGISTER

Building 032-C: Cal Poly Equine Center (Mare Barn)

The Mare Barn is a long, rectangular, side-gabled frame building. A full-length corridor, sheltered under the extended roof, is located on the east side of the building, which is clad and ceiled with the original V-groove rustic wood siding. Roofing material is composition shingle, replacing the original rigid asbestos shingles. The roofline is dominated by the original decorative cupola, pierced to resemble a dovecote. Stall doors, metal grates and window openings are also original.

Although moved onsite from another location in 1960, the Mare Barn retains integrity of materials, workmanship, design, feeling, and association. Its construction and intended use are strongly linked to the evolution and funding of the California Polytechnic School as a state institution. The resource meets eligibility Criterion 1 for listing in the California Register.

Figure 26. East elevation, Mare Barn.

Figure 27. View of corridor on east elevation, looking south, Mare Barn.

Figure 28. West elevation, Mare Barn.

Figure 29. West elevation, stall doors leading into paddocks sheltered under shed-roof addition, Mare Barn.

Figure 30. South gable end, showing roof articulation, Mare Barn.

Figure 31. North gable end, Mare Barn.

Figure 32. Original strap hinges on corridor stall doors, Mare Barn.

Figure 33. One of the original Mare Barn welded gates, made by students in the School's Metal Shop.

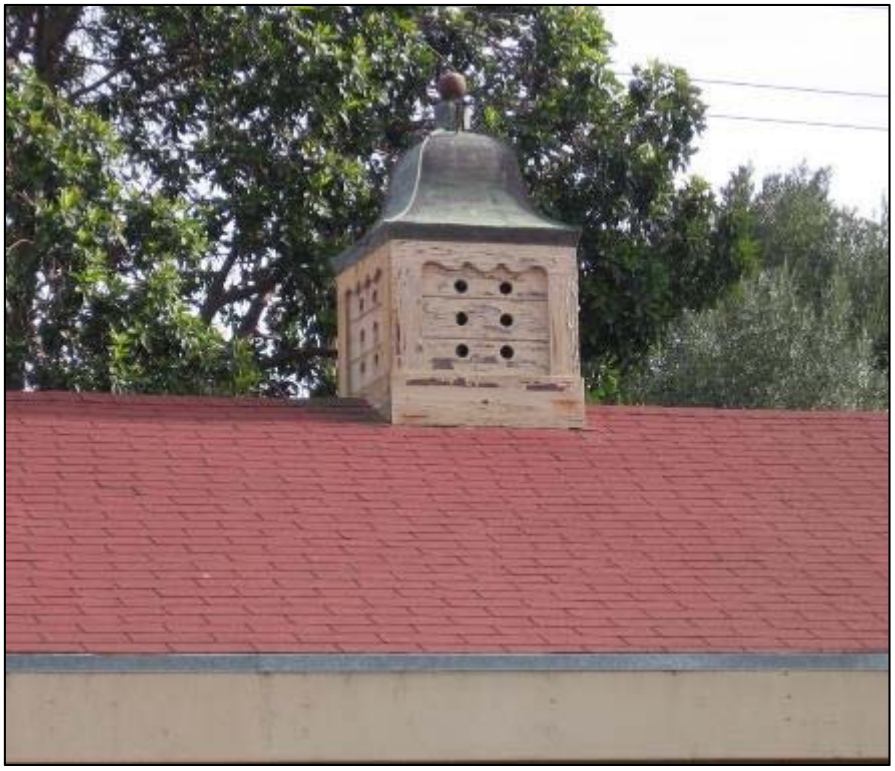


Figure 34. Original cupola with metal sheathing made by students in the School's Metal Shop. The cupola was Bartges' way of distinguishing the building as a barn for Thoroughbreds.

RESOURCES THAT DO NOT MEET THE ELIGIBILITY CRITERIA FOR LISTING IN THE CALIFORNIA REGISTER

Building 048-A: Environmental Horticulture Science Residence (Figures 28-41)
and
Building 016-A: Beef Unit Herdsman Residence (Figures 42-48)

These two residences were among a group of six frame "cottage-type dormitories" built in 1938 and ready for occupancy in 1939. Each cottage housed 12 men.[10] The two cottages in the Study Population are of similar construction, with raised concrete foundations, V-groove rustic wood siding, and intersecting gabled rooflines with vents in the gable ends, minimal eaves, and short exposed rafter tails with rounded ends. Both cottages have shed-roof extensions of the roof plane to create long, covered porches, supported by square wood posts, sheltering the main doorway. Each cottage has a low chimney at the roof ridge. The original windows are uniformly 6/6 double-hung wood sash with lugs on the upper sash.

Although both cottages have considerable integrity of location, materials, design, workmanship, feeling, and association, they lack sufficient historical significance to make them eligible for the California Register. They were undoubtedly designed by the State Division of Architecture and were well built with

[10] Smith, Morris Eugene Smith, *A History of California State Polytechnic College: The First Fifty Years, 1901-1951.* Ed.D. Dissertation, University of Oregon, 1957, p. 223.

good materials, but they do not have unusual architectural character or exhibit unusual construction methods.

Unless otherwise indicated, the photos were taken by the author on December 7, 2016.

Figure 35. West end of south elevation, Environmental Horticulture Science Residence.

Figure 36. East end of south elevation, Environmental Horticulture Science Residence.

Figure 37. East elevation, Environmental Horticulture Science Residence, with side entrance from modern wood deck.

Figure 38. North (rear) elevation, Environmental Horticulture Science Residence, with raised stacked brick planting bed.

Figure 39. West elevation, Environmental Horticulture Science Residence, with cast-stone planters; modern utility door and wood privacy screen near corner on north elevation.

Figure 40. West elevation, Beef Unit Herdsman Residence, photographed c1954 (University Archives).

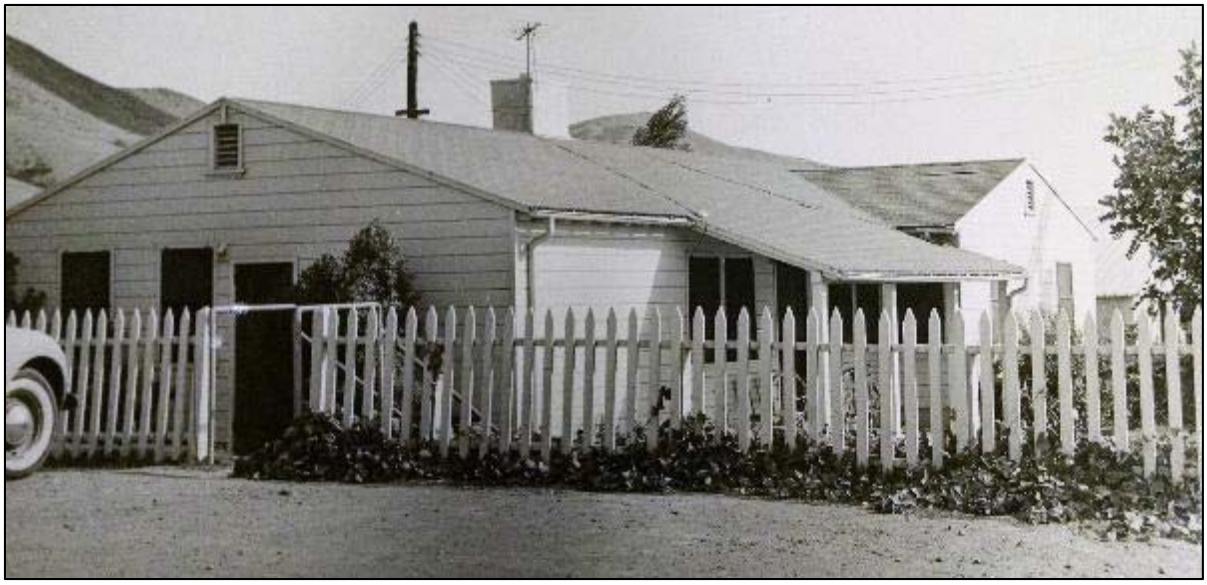


Figure 41. Northwest corner of Beef Unit Herdsman Residence, c1954 (University Archives).

Figure 42. West elevation, Beef Unit Herdsman Residence.

Figure 43. Southwest corner, Beef Unit Herdsman Residence.

Figure 44. Damaged V-groove rustic siding at southeast corner, Beef Unit Herdsman Residence, revealing double-wall construction.

Figure 45. East elevation, Beef Unit Herdsman Residence.

Figure 46. North elevation, Beef Unit Herdsman Residence.

Building 016-O: Beef Unit (Figures 47-57)
and
Building 016-B: Beef Unit Feed Unit (Figures 47, 58-63)

These functionally related but architecturally dissimilar buildings were both constructed in 1951, with occupancy in 1952. The Beef Unit is a commercially manufactured Butler building – a basic, versatile utility structure widely distributed throughout California on farm, industrial, and commercial properties. This model features a medium-pitch roof with large cylindrical vents on the ridge, barn doors on each gable end, and industrial awning windows along the sides. The north side and the interior of the building have both been modified with a system of cattle chutes.

The Beef Unit Feed Unit, which is likely to have been designed by the State Division of Architecture, is a complex of buildings and structures, nearly all of wood frame construction, including a two-story side-gabled barn and two long, perpendicular wings of side-gabled stalls and associated corrals on the south side of the barn. A modern pole barn is located on the east side of the main barn. The frame structures are similar in building form, materials, design, and feeling. Walls are clad in horizontal V-groove rustic wood siding. Roofing material is standing seam steel.

Both buildings retain a considerable degree of integrity in terms of location, materials, workmanship, design, feeling, and association. The setting of the feed unit has been altered by the recent construction of several nearby large-scale dormitory units. Neither of these Beef Unit buildings has any demonstrated historical significance or distinctive architectural character, based on the sources reviewed for this scoping effort. These resources therefore do not appear to meet the criteria for listing in the California Register. Future projects involving these buildings, however, should entail additional research into the specific historic context of the Feed Unit.

Figure 47. Beef Unit (lower left) and Beef Feeding Unit (center), c1954 (University Archives).

Figure 48. The southwest corner and south elevation with four regularly spaced windows, Beef Unit.

Figure 49. All of the windows are two-part steel sash; the upper 6-light sash is awning mounted, and the lower sash has 3 fixed lights.

Figure 50. East elevation, Beef Unit. The arrows indicate the location of the two Butler building plaques.

Figure 51 (left). The oval plaque identifies the gabled steel structure as a commercial Butler building.
Figure 52 (right). The rectangular plaque reads, “E.C. Livingston … Butler Steel Building, Paso Robles, Calif.”

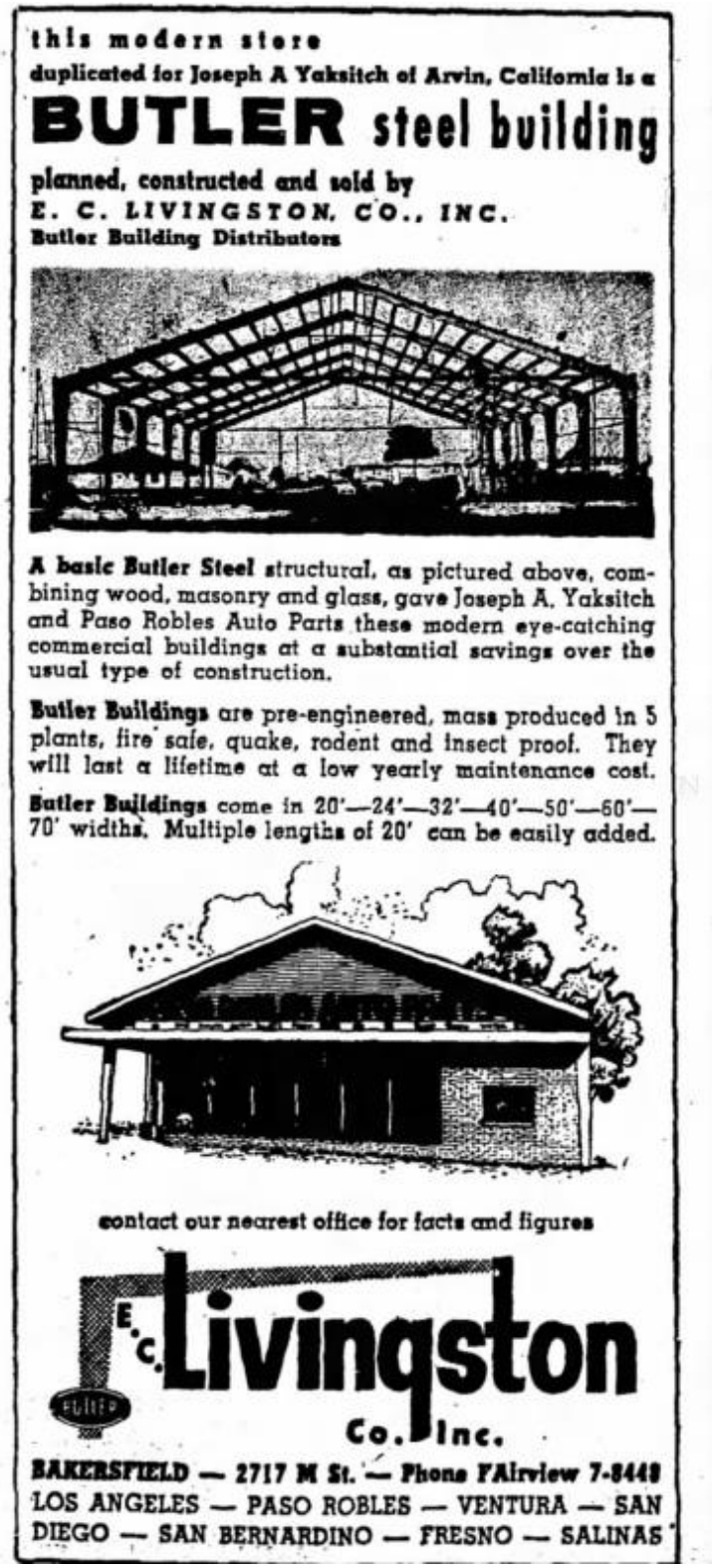


Figure 53. This E. C. Livingston Co., Inc., advertisement for Butler steel buildings appeared in the *Bakersfield Californian,* August 6, 1954, p. 26.

Figure 54 (above) and Figure 55 (below). System of cattle chutes on the north elevation, Beef Unit.

Figure 56. West elevation with sliding barn door, Beef Unit.

Figure 57. Original steel door with 6-light fixed glazing on west elevation near southwest corner, Beef Unit.

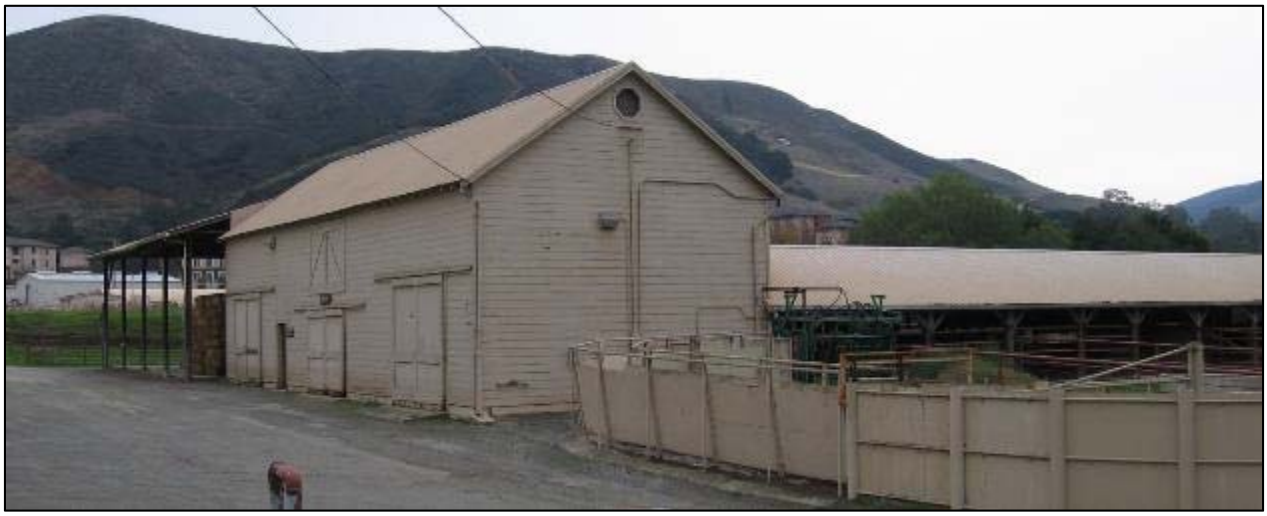


Figure 58. Northwest corner of side-gabled barn, Beef Unit Feed Unit.

Figure 59. Principal (north) elevation of barn, showing passageway to feeding stalls and two types of barn doors, Beef Unit Feed Unit.

Figure 60. Interior of passageway through barn to feeding stalls, Beef Unit Feed Unit. Walls are clad in bead board. Cross bracing at ceiling supports joists for second floor.

Figure 61. East wing of feeding stalls, Beef Unit Feed Unit.

Figure 62. West wing of feeding stalls, Beef Unit Feed Unit.

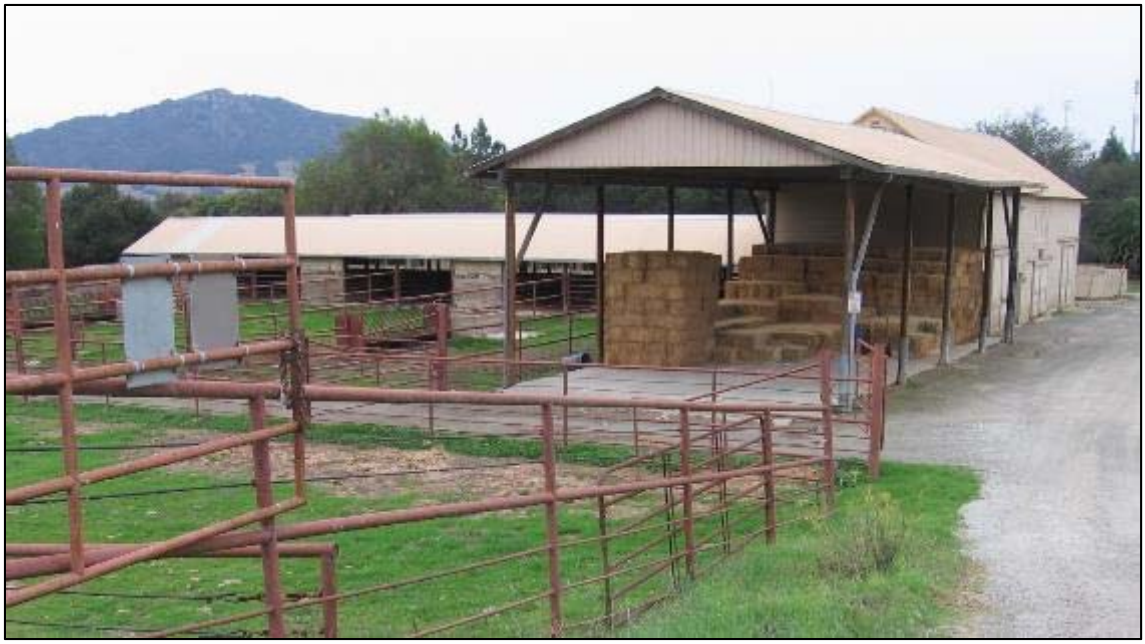


Figure 63. Modern pole barn at east side of main barn, Beef Unit Feed Unit.

Building 017-0: Crop Science (Figures 64-70)
Building 017-D: Crop Science Irrigation Pipe Storage (Figures 73)
and
Building 017-E: Crop Science Storage (Figures 64, 71-72, 74)

The complex of Crop Science buildings are utilitarian metal sheds of various sizes, erected in 1962. The principal building is U-shaped in plan, with intersecting gabled rooflines topped with low monitors. Original windows are fixed, multi-light sash; replacement windows on south elevation are vinyl sliders. The smaller storage buildings have high concrete foundations, shed roofs, and small windows, if any.

None of these Crop Science buildings has any demonstrated historical significance or distinctive architectural character, based on the sources reviewed for this scoping effort. These resources therefore do not appear to meet the criteria for listing in the California Register. Future projects involving this site, however, should entail additional research into the specific historic context of the main Crop Science building.

Figure 64. Crop Science Shed, 1974 (University Archives).

Figure 65. Interior yard on west side of U-shaped Crop Science building.

Figure 66. West corner of main Crop Science building.

Figure 67. North inside corner of main Crop Science building.

Figure 68. Southeast elevation with replacement windows, main Crop Science building.

Figure 69. Main entrance, northeast elevation of main Crop Science building.

Figure 70. Northeast elevation of main Crop Science building.

Figure 71 (left). Crop Science Storage Shed
Figure 72 (right). Concrete foundation of Crop Science Storage Shed.

Figure 73. Crop Science Irrigation Pipe Storage Shed.

Figure 74. Storage sheds to the right of the Irrigation Pipe Storage Shed.

CONCLUSIONS AND RECOMMENDATIONS

This report finds that one resource, **Building No. 032C - the Equine Center Breeding Barn (Mare Barn)**, meets one of the four criteria for listing in the California Register of Historical Resources and therefore constitutes a historical resource for the purpose of CEQA. The Mare Barn, constructed in 1940, is eligible under Criterion 1: *Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.*

The Mare Barn demonstrates its eligibility through its strong association with California Polytechnic School's Thoroughbred Breeding Program, inaugurated in 1940 under President Julian McPhee; its association with the School's curriculum emphasizing vocational "learn by doing" training; and its strong association with pari-mutuel wagering, the School's primary source of funding in the years 1940-1942. These years also mark the transition of the School from a strictly vocational training institution to a college authorized to confer the Bachelor of Science degree in specific areas. The period of significance is therefore 1940-1942, and the footprint of the building is the boundary of the historical resource.

Because four historic-period Equine Center buildings (032-C, 032-E, 032-F, and 032-O) are slated for demolition in connection with development of the proposed Oppenheimer Equestrian Facility, this scoping document has focused on those particular resources. Only the Mare Barn is a significant resource.

The Environmental Horticulture Science Residence (048-A) and the Beef Unit Herdsman Residence (016-A) are two of six cottage-type dormitories built in 1938. Although both cottages have considerable integrity, they lack sufficient historical significance to make them eligible for the California Register. They were undoubtedly designed by the State Division of Architecture and were well built with good materials, but they do not have unusual architectural character or exhibit unusual construction methods.

The Beef Unit (016-O) is a commercial steel Butler building – a basic utility structure widely distributed throughout California on farm, industrial, and commercial properties – erected in 1951. The Beef Unit Feed Unit (016-B), which is likely to have been designed by the State Division of Architecture, is a complex of historic-period frame buildings and structures, including a barn and associated stalls and corrals. Both the Butler building and the barn complex retain a considerable degree of integrity. Neither of these Beef Unit buildings has any demonstrated historical significance or distinctive architectural character, based on the sources reviewed for this scoping effort. These resources therefore do not appear to meet the criteria for listing in the California Register. Future projects involving these buildings, however, should entail additional research into the specific historic context of the Feed Unit.

The complex of Crop Science buildings (017-O, 017-D, and 017-E) consists of utilitarian metal sheds of various sizes, erected in 1962. None of these Crop Science buildings has any demonstrated historical significance or distinctive architectural character, based on the sources reviewed for this scoping effort. These resources therefore do not appear to meet the criteria for listing in the California Register. Future projects involving this site, however, should entail additional research into the specific historic context of the main Crop Science building (017-O).

Table 1. Historic-period architectural resources in the Study Population (Source: Cal Poly)

Building Number	Building Name	Occupancy Date	California Historical Resource Status Code
032-C	Equine Center Breeding Barn	3/1/1940	6Z
032-E	Equine Center Stallion Barn	3/1/1940	6Z**
032-F	Equine Center Horse Barn	3/1/1940	6Z
032-O	**Cal Poly Equine Center (Mare Barn)**	**3/1/1940**	**3CS***
048-A	Environmental Horticulture Science Residence	1/1/1938	6Z
016-A	Beef Unit Herdsman Residence	1/1/1938	6Z
016-O	Beef Unit	1/1/1952	6Z
016-B	Beef Unit Feed Unit	1/1/1952	6Z
017-O	Crop Science	8/1/1962	6Z
017-D	Crop Science Irrigation Pipe Storage	8/1/1962	6Z
017-E	Crop Science Storage	8/1/1962	6Z

*Appears eligible for California Register as an individual property through survey evaluation
**Found ineligible for National Register, California Register or Local designation through survey evaluation

There is no formal process of consultation with SHPO under CEQA, and thus no formal concurrence in determinations of significance and effect is required.

Recommendations

The Mare Barn is a significant surviving resource from the very beginnings of equestrian science on the Cal Poly campus. Specifically designed by William K. Bartges of the State Division of Architecture for the Thoroughbred Horse Breeding program, the Mare Barn clearly embodies its express purpose, as well as the School's Learn-by-Doing philosophy. The distinctive cupola and welded iron gates were made in the School's Metal Shop, and the building itself was built by staff and students.

As an already relocated building, the Mare Barn could be retained and moved again to a featured location on the Oppenheimer Equestrian Facility grounds, where it might be adaptively reused and commemorated with a permanent interpretive exhibit. If relocation is not feasible, the following measures are recommended prior to any impacts to the Mare Barn (Building 032-O:

a. The following interior and exterior documentation of the Mare Barn (Building 032-O) shall occur: floor plans and elevations; interior and exterior descriptive analysis; and, creation of a photographic record.

b. The cupola and iron gate (at least one gate) features shall be preserved and retained by the University. The cupola shall be repurposed as an interpretive exhibit within the Equine Unit or Environmental Horticultural Science Unit on campus. The iron gate shall be retained and preserved by the University, either in the archives, or for future re-use.

c. In-depth interviews shall be conducted with early members of the Equestrian Science program that are familiar with the construction of the structure, if feasible.

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Daily Racing Form
El Mustang
El Rodeo

Los Angeles Times
Mustang News
Polygram
Polytechnic Californian
San Bernardino County Sun
Woodland Daily Democrat

Websites

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http://digitalcommons.calpoly.edu/

http://mband.calpoly.edu/about/

http://ucdavismagazine.ucdavis.edu/issues/fall97/ClassNotesTOC/ClassNotesMemoriam.html (Boone obituary)

http://wkkelloggarabianhorsecenter.com/the-kellogg-legacy

http://www.allgov.com/usa/ca/departments/business-consumer-services-and-housing-agency/california_horse_racing_board?agencyid=219

http://www.oac.cdlib.org

10. PREPARER'S QUALIFICATIONS

Paula Juelke Carr is a professional historian and architectural historian, and is on the San Luis Obispo County list of Qualified Historic Resource Consultants. She earned a BA in cultural anthropology in 1972 and an interdisciplinary MA in history, art history, anthropology, and folklore and mythology in 1981 from the University of California, Santa Barbara, with additional coursework in history at the University of Arizona in 1982-1983. She has been working in the field of California history for more than 25 years -- specifically as an architectural historian for the California Department of Transportation (District 5) from 2004 to 2015 – and is now a consultant.

APPENDIX E. PHASE I ENVIRONMENTAL SITE ASSESSMENT

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Oppenheimer Project
California Polytechnic State University San Luis Obispo
San Luis Obispo, California

February 1, 2017

Prepared by:
Haro Environmental
Project 605-2015

In conjunction with:
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San Luis Obispo, California

Prepared for:

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Prepared by:

Elliot R. Haro
Principal Scientist

Reviewed by:

Timothy Nelligan
Professional Engineer

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Appendix D – Qualifications

EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (Phase I ESA) of the Oppenheimer Pavilion and Agricultural Events Center Project (the Project) located at the campus of California Polytechnic State University San Luis Obispo (Cal Poly) in San Luis Obispo, California (the Site) was performed by Haro Environmental [sub-consultant to SWCA Environmental Consultants (SWCA)] for California Polytechnic State University San Luis Obispo (Cal Poly). A site vicinity map is provided on Plate 1. Haro Environmental performed this Phase I ESA consistent with the American Society for Testing and Materials (ASTM) Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). Exceptions to, or deletions from, this practice are described in this report.

The purpose of this assessment was to identify known, potential or historic recognized environmental conditions (RECs) resulting from historic and/or current uses of hazardous substances or petroleum products at the Site. We understand SWCA has requested this Phase I ESA on behalf of Cal Poly who is considering redeveloping the Site. The findings of this environmental assessment are based on Haro Environmental's knowledge of the Site from observations and information gathered during this Phase I ESA.

The proposed Project includes four conceptual phases with Phases 1, 2, and 3 located at the northern portion of the Site and including the "Equine Unit" (EU), "Environmental Horticulture Science" (EHS) unit, and "Agriculture Pavilion" (AP). The Phase 1 area encompasses approximately 25 acres, Phase 2 encompasses approximately 13 acres, and Phase 3 encompasses approximately 11 acres which currently supports various equine, environmental horticulture, and beef unit facilities including a hay barn, mare barns, breeding barns, a stallion barn, horse barn, equine center, soil science greenhouse, lath houses, tractor barn, Garcia barn, greenhouses, shade house, bug house, pesticide storage, science labs, beef unit facilities, and residential structures. Phase 4 of the Project is located in the southwestern portion of campus, and identified as the "Crops Science Unit" (CSU). The Phase 4 project area encompasses approximately 7 acres. The CSU project area currently supports crop sciences support facilities, including greenhouses, storage containers, equipment storage, and agricultural production.

Elevation at the Site ranges from approximately 280 feet above mean sea level (MSL) near the southwest corner of the Site to approximately 440 feet above MSL at the northeast corner of the Site. Relief across the Site generally slopes towards the southwest.

The Site is currently developed with the following:

- EU: Multiple buildings area present including stalls and an open pavilion.

- EHS: Multiple structures are present for classrooms, storage, and greenhouses.

- CSU: One greenhouse, storage containers, and farm equipment are present.

Results of a regulatory agency database search indicate multiple facilities were listed in the databases reviewed, however, because Cal Poly only has one address for all the campus buildings, the majority of the listings are located a distance from the project areas and are not expected to pose an environmental concern. The nearest listing was the Cal Poly University Farm Shop located at the intersection of Highland Drive and Via Carta. The Cal Poly University Farm Shop was listed in the leaking underground storage tank (LUST) database for the former presence of a 1,000-gallon diesel fuel, 550-gasonine and a 550-diesel fuel underground storage tanks (USTs) removed from this facility in 1999. Soils were excavated, soil vapor extraction performed, and the case was closed by the Central Coast Regional Water Quality Control Board (CCRWQCB) in 2014. Because this facility is located a distance from the project areas and down-gradient, and because the case was closed in 2014, the Cal Poly University Farm Shop facility is not expected to pose an environmental concern to the project areas.

A review of historic aerial photographs, topographic maps, and city directories listings indicate the CSU was previously used for agricultural and rural residences, and was developed with the present day structures after 1960. The AP was developed between 1949 and 1960, and the EU was developed between 1960 and 1963. The EHS unit was developed between 1963 and 1976.

A reconnaissance of the Site was conducted by a Haro Environmental representative on December 20 and 21, 2016 accompanied by Mr. Austin Creel, Project Manager with Cal Poly. During the reconnaissance, Haro Environmental observed hazardous materials and petroleum products at several locations at the Site. Herbicides and pesticides were observed stored within Building 048-M at EHS, and floor drains were observed. In addition, chemical mixing appears to occur outside of Building 048-M on concrete and under a canopy. Reportedly, the floor drains empty into an approximately 1,500-gallon above ground storage tank (AST) which is emptied by vacuum truck on an as-needed basis, and the contents disposed of under manifest. Reportedly, this AST replaced a former evaporation pond at the current AST location. Small quantities of gasoline and diesel fuel are stored at EHS within chemical cabinets, and are not expected to pose an environmental concern to the Project. Agricultural land use including row crops and equipment storage was observed at the CSU.

Based on the data gathered and reviewed during this Phase I ESA, Haro Environmental did not identify recognized environmental conditions or concerns that have impacted, or pose a significant environmental threat to subsurface soil, soil vapor, or groundwater beneath the Site with the exception of the following:

- The handling of pesticides and herbicides at the EHS unit. The chemical handling and storage area is located at the south end of EHS, within Building 048-M. Pesticide and herbicide storage was not observed in any of the other EHS buildings. Chemical mixing occurs adjacent to the storage building under a covered area on concrete, with floor drains. Various types and quantities of pesticides and herbicides were observed and several floor drains were observed in the area of the chemical storage. The floor drains in the area reportedly discharge to an approximately 1,500-gallon AST located downslope from Building 048-M. The AST appears to have adequate secondary containment, and no evidence of spills or leaks were observed. Reportedly, this AST is emptied by a contractor under manifest on an as-needed basis. Therefore, the presence of this AST and chemical handling at Building 048-M is not expected to pose a significant environmental concern to the Project.

- Former evaporation pond near the current pesticide AST location. Reportedly, an evaporation pond was previously located in this area and used to collect rinsate from cleaning out chemical application equipment. This pond was reportedly not used to dispose of the residual chemicals in the application equipment or bulk chemicals. Because we have no evidence indicating this evaporation pond was used for anything other than rinsate from chemical application equipment, the former presence and use of an evaporation pond would not be expected to pose a significant environmental concern to the Project.

- Small quantities of diesel fuel and gasoline were observed at EHS, however, no significant spills or releases were observed in the area of fuel storage. Therefore, fuel storage is not expected to pose a significant environmental concern to the Project.

- The presence of phosphoric acid within a storage shed near the CSU. No staining of the surface beneath the phosphoric acid was observed. Therefore, this chemical handling is not expected to pose a significant environmental concern to the Project.

- Agricultural land use near the CSU. Agricultural land use for row crops can include the application of herbicides and/or pesticides which can accumulate in soil. Particularly banned substances (e.g., DDT) can persist in soil for long periods of time, even after their application has been stopped. Although we have no evidence indicating DDT was used at the CSU, agricultural soils may contain elevated levels of chemicals. Continued agricultural land use would not be expected to pose an environmental concern to the Project.

- Chemical handling and mixing at the CSU. Although pesticides and herbicides are stored at the CSU, this project area doesn't include the chemical storage area. However, chemical application equipment is stored within the project area and may a source of a release of agricultural chemicals to the environment.

- Electrical transformers. Several pad-mounted and one pole-mounted electrical transformers were observed within the project area. The pad mounted transformers appeared to be relatively new and would not be expected to contain PCBs. In addition, staining of the surface beneath the transformers, including the pole-mounted transformer, was noted. Therefore, the presence of transformers within the project area would not be expected to pose an environmental concern to the Project. An older OFC switch was observed at the EHS unit adjacent to a pad-mounted transformer. Reportedly, this OFC switch was tested for PCBs, and the results indicated the oil with this OFC switch contains 62 ppm PCBs. No visible staining of the concrete surface beneath the OFC switch was noted and it did not appear to be leaking fluid.

Based on the findings of this Phase I ESA, the following measures are recommended to avoid potential impacts associated with identified RECs:

- If construction of the proposed Project requires existing soils in the vicinity of the CSU, the existing pesticide AST, or the former evaporation pond to be removed and disposed of offsite, it is recommended that Cal Poly collect a limited number of soil samples from the area(s) and test them for pesticides, herbicides, and heavy metals to determine if the soils require special handling and disposal.
- Prior to demolition at the EHS unit, the OFC switch with the elevated PCBs should be removed and disposed of in accordance with all applicable rules and regulations.

1.0 INTRODUCTION

This Phase I Environmental Site Assessment (Phase I ESA) of the Oppenheimer Pavilion and Agricultural Events Center Project (the Project) located at the campus of California Polytechnic State University San Luis Obispo (Cal Poly) in San Luis Obispo, California (the Site) was performed by Haro Environmental for SWCA Environmental Consultants (SWCA). A site vicinity map is provided on Plate 1. Haro Environmental performed this Phase I ESA consistent with the American Society for Testing and Materials (ASTM) Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). Exceptions to, or deletions from, this practice are described in this report.

1.1 PURPOSE

This Phase I ESA was conducted in an effort to identify known, potential or historic recognized environmental conditions (RECs) resulting from historic and/or current uses of the Site. We understand SWCA has requested this Phase I ESA on behalf of Cal Poly to potential environmental concerns potentially encountered during construction of the Project. The ASTM Standard defines a REC as:

> "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions"

The ASTM Standard defines a historical REC as:

> "An environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently." For example, a historical REC could be identified if a past release of any

hazardous substances or petroleum products has occurred in connection with the property and has been remediated to the satisfaction of the lead regulatory agency as evidenced by a no further action letter or a case closure determination.

At the request of SWCA on behalf of Cal Poly, which we understand is considering redeveloping the Site, Haro Environmental has completed this Phase I ESA. This report is subject to the limitations presented in this Phase I ESA report.

This report describes Haro Environmental's assessment methodology, presents our findings, and provides our opinion as to the potential presence of RECs in connection with the Site.

1.2 SCOPE OF SERVICES

The scope of services conducted for this study included the following tasks:

- Perform an on-site reconnaissance to identify indicators of the existence of hazardous materials or petroleum products.

- Observe adjacent or nearby properties from the Site and public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials or petroleum products.

- Obtain and review an environmental records database search from Environmental Data Resources, Inc. (EDR) to acquire information about the potential for hazardous materials to exist on-site or at nearby properties.

- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about topography and uses of the Site and nearby properties.

- Review historic aerial photographs, topographic maps, and historic city directories listings to obtain information about historic uses of the Site and adjacent properties.

- Review California Division of Oil and Gas records to obtain information about historic oil and gas activity in the vicinity of the Site.

- Conduct interviews with persons familiar with the Site development and local and/or State government agencies, as warranted, to obtain information about current and historic uses of the property.

- Prepare this report documenting the findings of the Phase I study.

Our scope of services did not include any inquiries with respect to non-scope ASTM considerations including but not limited to asbestos containing materials, lead-based paint, mold, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, electromagnetic fields or geologic hazards.

2.0 SITE SETTING

The Site setting presented in this section describes the condition of the Site at the time of the Phase I ESA. Tables 2-1 and 2-2 summarize the physical characteristics of the Site and adjoining properties. A Site and Adjacent Land Use Map is provided on Plate 2, and Plates 3 and 4 provide details of two areas of the Site including the Horse Unit and Environmental Horticultural Sciences (EHS) Unit near the northern portion of the Site, and the Crops Unit (CU) area at the western portion of the Site.

2.1 SITE DESCRIPTION

The proposed Project includes four conceptual phases with Phases 1, 2, and 3 located at the northern portion of the Site and including the "Equine Unit" (EU), "Environmental Horticulture Science" (EHS) unit, and "Agriculture Pavilion" (AP). The Phase 1 area encompasses approximately 25 acres, Phase 2 encompasses approximately 13 acres, and Phase 3 encompasses approximately 11 acres which currently supports various equine, environmental horticulture, and beef unit facilities including a hay barn, mare barns, breeding barns, a stallion barn, horse barn, equine center, soil science greenhouse, lath houses, tractor barn, Garcia barn, greenhouses, shade house, bug house, pesticide storage, science labs, beef unit facilities, and residential structures. Phase 4 of the Project is located in the southwestern portion of campus, and identified as the "Crops Science Unit" (CSU). The Phase 4 project area encompasses approximately 7 acres. The CSU project area currently supports crop sciences support facilities, including greenhouses, storage containers, equipment storage, and agricultural production.

Table 2-1 provides a summary of the physical location and size of the Site, as well as the current uses. This information was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, and a site visit. Additional site description information was obtained during the site visit; please refer to the Section 5.0 of the report that covers site reconnaissance information.

TABLE 2-1
SITE LOCATION AND LAND USE

Parameter	Information/Comments
Location	The location is described above.
Assessor's Parcel Nos. (APNs)	Portions of APNs 073-341-019, -020, and -026
Section, Township, and Range	Sections 14, 22, and 23, Township 30 South, Range 12 East of the Mount Diablo Base and Meridian.

Current Use	The current use is described above.

2.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

Information on regional geology and hydrogeology is presented in Table 2-2. This information was obtained from published data and maps of the Site vicinity.

TABLE 2-2
PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

Geologic/Hydrogeologic Parameter	Information/Comments
Site Topography	Based on a review of the USGS San Luis Obispo 7.5-Minute Topographic Quadrangle Map dated 2012; elevation at the Site ranges from approximately 280 feet above MSL near the southwest corner of the Site to approximately 440 feet above MSL at the northern portion of the Site. Relief across the Site generally slopes to the southwest.
Site Geology and Soil Types	The Site is located within the Coast Ranges of the California Geomorphic Provinces (CGS, 2002). The Coast Ranges are characterized by a series of northwest trending ranges and valleys, sub-parallel to faults branching from the San Andres Fault. These ranges extend into southern California and are bound on the east by the Great Valley, on the south by the Transverse Ranges, to the west by the Pacific Ocean, and to the north by the Klamath Mountains. According to the Preliminary Geologic Map of the San Luis Obispo 7.5-minute Quadrangle (CGS, 2013), the northern portion of the Site is underlain by Franciscan Complex Mélange consisting of a chaotic mixture of fragmented rock masses embedded in a penetrively sheared matrix of argillite and crushed metasandstone. The southwestern portion of the Site is underlain by young alluvial flood-plain deposits (Holocene to late-Pleistocene) consisting of unconsolidated sand, silt, and clay-bearing alluvium deposited on flood plans and along valley floors. According to the Geocheck® section of the EDR report (Appendix A), soils at the Site include the Los Osos Loam. These soils have loam to surface textures, slow infiltration rates, and are well drained.
Site Hydrogeologic Setting	The northern portion of the Site is not located within a groundwater basin as defined by the California Department of Water Resources (DWR, 2013). The southwestern portion of the Site is located with the San Luis Obispo Valley Groundwater Basin. Groundwater beneath this portion of the Site occurs in an unconfined aquifer in unconsolidated alluvial deposits (DWR, 1975). According to the GeoCheck® section of the EDR report, There are no groundwater wells located within a 1-mile radius of the Site. No groundwater wells were observed adjacent or within the project area during the site reconnaissance.

2.3 ADJOINING AREA LAND USE

A drive-by survey of the area adjoining the Site was performed by Haro Environmental personal on December 20, 2016. The results of this survey indicate undeveloped land generally surrounds the northern portion of the Site and agricultural land uses generally surround the southwestern portion of the Site. Site and adjoining land uses are depicted on Plate 2.

2.4 LOCATION AND LEGAL DESCRIPTIONS

The Site address is 1 Grand Avenue, and includes portions of County of San Luis Obispo Assessor's office APNs 073-341-019, -020, and -026.

2.5 USER PROVIDED INFORMATION

Mr. Thomas Featherstone, Specialized Equipment Technician with Cal Poly, was interviewed for actual knowledge pertaining to the Site to help identify the possibility of RECs in connection with the Site. The completed environmental questionnaire is provided in Appendix B. The results of the interview are provided below.

2.5.1 Title Records

Haro Environmental was provided and reviewed the Preliminary Title Report for the Site prepared by First American Title Company and dated September 29, 2008 (Appendix B). The Preliminary Title Report did not contain deed restrictions or land use controls related to environmental concerns..

2.5.2 Environmental Liens or Activity and Use Limitations

Mr. Featherstone is unaware of any information pertaining to environmental liens or activity and use limitations for the Site. Haro Environmental was not provided with a copy of an environmental lien records search for the Site.

2.5.3 Specialized Knowledge

Mr. Featherstone did not provide Haro Environmental with any information pertaining to specialized knowledge or experience regarding the Site.

2.5.4 Commonly Known or Reasonably Ascertainable Information

Mr. Featherstone did not provide Haro Environmental with and was not aware of any information pertaining to commonly known or reasonably ascertainable information about the Site.

2.5.5 Valuation Reduction for Environmental Issues

Mr. Featherstone was not aware of and did not provide Haro Environmental with any information pertaining to a valuation reduction for the Site relative to any known environmental issues.

2.5.6 Owner, Property Manager, and Occupant Information

Mr. Featherstone indicated that based on his knowledge and experience related to the property, there are no obvious indicators that point to the presence or likely presence of contamination at the Site.

2.5.7 Reason for Performing Phase I ESA

The purpose of this Phase I ESA was to assess the environmental conditions of the Site, taking into account commonly and reasonably ascertainable information.

2.5.8 Other

Mr. Featherstone indicated PCBs are present at the Site and information related to PCBs is provided in Section 5.1.11 of this report.

2.6 ENVIRONMENTAL LIENS

No environmental lien search was conducted by the preparer or the User of this Phase I report.

3.0 RECORDS REVIEW

Government agency database records are sources of information that may be helpful in evaluating activities that may have contributed to a release of hazardous substances or petroleum products to soil and/or groundwater. Haro Environmental contracted a government agency database search from EDR. A copy of the EDR report, which specifies the approximate minimum search distance for each public list as defined in the ASTM Standard, is included as Appendix A.

Properties that were identified within the approximate minimum search distance from the Site as stated in the ASTM Standard were reviewed for their potential to impact the project areas (see Appendix A for a acronyms used by EDR). Multiple facilities were listed in the databases reviewed, however, because Cal Poly only has one address for all the campus buildings, the majority of the listings are located a distance from the project areas and are not expected to pose an environmental concern.

3.1 RESULTS OF DATABASE SEARCH

The following sections contain information on the results of the government records search conducted by EDR. Opinions presented below are based on information provided in EDR's report (unless otherwise noted) and on criteria such as distance from the subject property, anticipated groundwater movement direction in the vicinity of the Site, and the nature of any reported unauthorized releases. In assessing the potential impact to buildings materials, soil, soil vapor, and/or groundwater beneath the Site, the shallowest groundwater was considered with an anticipated groundwater movement direction assumed to be to the south-southwest consistent with the regional topographic gradient.

3.1.1 Subject Property

Cal Poly was listed in multiple databases, however, only one listing identified as the Cal Poly University Farm Shop was close to the project area. The Cal Poly University Farm Shop was listed in the leaking underground storage tank (LUST) database for former presence of a 1,000-gallon diesel fuel, 550-gasonine and a 550-diesel fuel underground storage tanks (USTs) removed from this facility in 1999. Soils were excavated, soil vapor extraction performed, and the case was closed by the Central Coast Regional Water Quality Control Board (CCRWQCB) in 2014. Because this facility is located a distance

from the project areas and down-gradient, and because the case was closed in 2014, the Cal Poly University Farm Shop facility is not expected to pose an environmental concern to the project areas.

3.1.2 Adjacent Properties

No adjacent properties were listed in the databases searched by EDR.

3.1.3 Nearby Properties

Multiple nearby properties were listed in the databases searched by EDR, however, based on either distance from the Site or on the nature of the listing (non-release site or site with no violations), these nearby listed properties would not be expected to pose an environmental concern to the Site

3.1.4 EDR Orphan List

Sites not plotted by EDR due to poor or inadequate address information are referred to as orphan sites. There was one unmapped orphan site listed in the EDR Report and included the Cal Poly Univeristy Farm Shop discussed in Section 3.1.1 above.

3.1.5 Non-ASTM Issues

Assessment of non-ASTM issues including but not limited to asbestos containing materials, lead-based paint, mold, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, electromagnetic fields or geologic hazards were not included as part of this Phase I ESA. The following non-ASTM issues were evaluated.

According to the National Wetland Inventory Map, portions of the Site may be located with a wetland (USFWS, 2014; see Appendix A Radius Report Overview Map for details).

According to information provided in the EDR Report, portions of the Site adjacent to the Stenner Creek are located within a 500-year floodplain.

3.2 OTHER RECORDS REVIEWED

The following additional sources of information were reviewed as part of this Phase I ESA.

3.2.1 Public Agency Records

The following public agencies were consulted regarding files for the project area and no information was obtained:

- Central Coast Regional Water Quality Control Board
- California Department of Toxic Substances Control
- San Luis Obispo County Air Pollution Control District
- San Luis Obispo County Environmental Health Services
- City of San Luis Obispo Planning and Building Department
- County of San Luis Obispo Planning and Building Department
- San Luis Obispo Fire Department

3.2.2 Previous Environmental Reports

No previous Environmental Site Assessment Reports for the Site were provided for review.

4.0 SITE HISTORY

The history of the site was researched to identify obvious uses of the site back to the first developed use, or at least 40 years ago, whichever is earlier or readily available.

Several data gaps since 1940 of greater than 5 years were identified in the historical records reviewed and included the years from 1942 to 1949, from 1952 to 1963, from 1965 to 1971, from 1981 to 1983, from 1987 to 1991, and from 1995 to 2005. These data gaps are considered insignificant because the Site was developed in 1985, and the use appears to be similar during the remaining data gaps.

4.1 AERIAL PHOTOGRAPHS

A review of historical aerial photography may indicate past activities at a property that may not be documented by other means, or observed during a site visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR. A tabulation of the aerial photographs reviewed is presented in Table 4-1.

TABLE 4-1
HISTORICAL AERIAL PHOTOGRAPHS REVIEWED

Date	Approximate Scale	Source
1939	1” = 500’	USDA
1949	1” = 500’	USDA
1960	1” = 500’	USAF
1963	1” = 500’	USGS
1976	1” = 500’	USGS
1981	1” = 500’	USDA
1987	1” = 500’	USGS
1994	1” = 500’	USGS/DOQQ
2005	1” = 500’	USDA/NAIP
2006	1” = 500’	USDA/NAIP
2009	1” = 500’	USDA/NAIP
2010	1” = 500’	USDA/NAIP
2012	1” = 500’	USDA/NAIP

Note: Aerial photographs only provide information on indications of land use and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone.

Copies of the reviewed aerial photographs are included in Appendix A. The following is a summary of our review of these photographs.

- ***1939*** – The majority of the Site appears as undeveloped land. A small residential structure and associated access road can be seen on the northern portion of the project site. The present day farmhouse can be seen on the northwestern portion of the CSU project site. A separate farmhouse and associated agricultural features and access road are located on the eastern portion of the Crop Sciences project site. The majority of nearby properties in the vicinity of both the EHS project site and the CSU project site appear to consist of undeveloped land with the exception of sparse agricultural development and Cal Poly San Luis Obispo academic facilities beyond.

- ***1949*** –The Site and nearby properties appear similar to the 1939 aerial photograph.

- ***1960*** – The Site appears similar to the 1949 aerial photograph with the exception of one structure located on the Equine Unit. The two Beef Unit structures can also be seen in the southwestern portion of the EHS project site. The southern and western portions of the CSU project site has been cut off in the 1960 aerial photograph, but appears to consist of vacant land with the exception of a small farmhouse in the western portion of the site and an associated driveway. Nearby properties appear similar to the 1949 aerial photograph with the exception of development of agricultural crops on portions of adjacent lands in the vicinity of both the EHS project site and the CSU project site.

- ***1963*** – The Site appears similar to the 1960 aerial photograph with the exception of construction of the Equine Center on the Site including portions of five present day structures. A possible farmhouse can be seen on the southern portion of the CSU project site along with an access road to the east of this structure. Nearby properties appear similar to the 1960 aerial photograph with the exception of the construction of the present day U-shaped CSU building located to the west of Mount Bishop Road.

- ***1976*** – Due to the poor quality of the 1976 aerial photograph, specific Site features and land uses could not be confirmed.

- ***1981*** – Additional development of the Equine Center on the Site has occurred including the two riding arenas and one possible water tank or trough to the north of the rectangular riding arena. Construction of the majority of the EHS structures and associated driveway and parking areas has

occurred. The 1981 aerial photograph has been cut off in the southwestern portion of the CSU project site. New agricultural crops can be seen on both project sites. Nearby properties appear similar to the 1963 aerial photograph with the exception that the portion of Highland drive to the west of Mount Bishop Road has been developed.

- ***1987*** – Due to the poor quality of the 1987 aerial photograph, specific Site features and land uses could not be confirmed.

- ***1994*** – The Site appears similar to the 1981 aerial photograph with the exception of two possible water tanks or troughs to the north of the rectangular riding area on the northern portion of the EHS project site. In addition, expansion of the chemical storage and mixing buildings can be seen on the central portion of the EHS project site. Nearby properties appear similar to the 1981 aerial photograph with the exception of additional academic structures and associated parking and driveway features located to the south of the EHS project site, as well as to the east of the CSU project site.

- ***2005*** – The Site appears similar to the 1994 aerial photograph with the exception that one possible water tank or trough is located to the north of the rectangular riding arena on the northern portion of the EHS project site where two were formerly seen. One building is located to the north of the Beef Unit, west of Via Carta. In addition, a new, larger structure can be seen on the eastern portion of the CSU project site, to the north of Highland Drive where a smaller building was formerly located. Nearby properties appear similar to the 1994 aerial photograph.

- ***2006*** – The Site appears similar to the 2005 aerial photograph with the exception of a second building located to the north of the Beef Unit on the EHS project site. Nearby properties appear similar to the 2005 aerial photograph.

- ***2009*** – The Site appears similar to the 2006 aerial photograph with the exception that the possible water tank or trough to the south of the riding ring is no longer visible on the northern portion of the Oppenheimer project site. Village Drive is now depicted with the two structures north of the Beef Unit shown on the southeast corner of Village Drive and Via Carta. The CSU project site appears similar to the 2006 aerial photograph with the exception that two new greenhouses can be seen on the northern portion of this site. In addition, the building located to the north of Highland Drive has been demolished. Nearby properties appear similar to the 2006 aerial photograph with the exception of the multi-unit residential development appearing at its present day location and associated access roads depicted to the east of the EHS project site.

- ***2010*** – The Site appears similar to the 2009 aerial photograph, with the exception that two buildings previously located on the southeast corner of Via Carta and Village Drive on the EHS project site have been demolished. Nearby properties appear similar to the 2009 aerial photograph.

- ***2012*** – The Site appears similar to the 2010 aerial photograph. Nearby properties appear similar to the 2010 aerial photograph, with the exception of a new residential building located to the southeast of the northeastern corner of the EHS project site.

4.2 HISTORICAL TOPOGRAPHIC MAPS

Haro Environmental reviewed historical topographic maps of the Site vicinity. The topographic maps reviewed for this assessment are listed below in Table 4-2.

TABLE 4-2
HISTORICAL TOPOGRAPHIC MAPS REVIEWED

Year	Quadrangle	Series	Scale
1897	San Luis Obispo	15 minute	1: 62,500
1900	San Luis	30 minute	1: 125,000
1942	San Luis Obispo	15 minute	1:62,500
1952	San Luis Obispo	15 minute	1:62,500
1965 (aerial photorevised from 1963)	San Luis Obispo	7.5 minute	1:24,000
1979 (photorevised from 1979, aerial photorevised from 1976)	San Luis Obispo	7.5 minute	1:24,000
1994 (aerial photorevised from 1988, edited from 1994)	San Luis Obispo	7.5 minute	1:24,000
1995 (edited from 1995)	San Luis Obispo	7.5 minute	1:24,000
2012	San Luis Obispo	7.5 minute	1:24,000

The Site is located on the Cal Poly campus in San Luis Obispo, California and consists of two separate areas identified herein as the EHS project site and the CSU project site. The EHS project site portion encompasses over 40 acres in the vicinity of Village Drive and Via Carta. The CSU project site encompasses approximately 7 acres in the area west of Highland Drive and Mount Bishop Road. The nearest surface water bodies include the unnamed intermittent streams located to the north of the EHS

project site, and to the west of the CSU project site. The following is a summary of our review of the maps.

- ***1897*** – The Site and surrounding properties are depicted as undeveloped land with the exception of one small structure on the northern portion of the EHS project site and one on the western portion of the CSU project site. Sparse structures are depicted in the vicinity of the Site along with the Southern Pacific Railroad running north/south between the EHS and CSU project sites. Buildings in the location of present day Cal Poly San Luis Obispo academic facilities can be seen on the southern portion of the map.

- ***1900*** – The Site and surrounding properties are depicted similar to the 1897 map.

- ***1942*** – The Site appears similar to the 1900 topographic map with the exception of the depiction of two small structures located on the northern portion of the present day Equine Unit. In addition, an access road traverses the CSU project area, running generally east/west. Surrounding properties appear similar to the 1900 map with the exception that portions of Via Carta to the west and the access road to the south of the EHS project site are depicted. In addition, an access road can be seen to the west of the northwestern portion of the CSU project area. The campus instructional core is depicted as California Polytechnic School on this map.

- ***1952*** – The Site appears similar to the 1942 topographic map with the exception that the two structures on the northern portion of the EHS project site are no longer depicted. Surrounding properties are depicted similar to the 1942 map with the exception of increased development on the Cal Poly campus and in surrounding areas.

- ***1965*** – The Site appears similar to the 1952 topographic map with the exception that the EHS project site is depicted with three structures associated with the Equine Unit and two structures associated with the Beef Unit. Via Carta now extends to the northern portion of this Site. Surrounding properties are depicted similar to the 1952 map, with the exception of construction of the U-shaped CSU building located adjacent to the east of the CSU project area. In addition, Mount Bishop Road is now depicted to the east of this building. Surrounding properties are depicted similar to the 1945 map with the exception of increased development on the Cal Poly campus and in surrounding areas.

- ***1979*** – The EHS project site appears similar to the 1965 topographic map with the exception of four structures depicted in the Equine Unit and four structures depicted in Environmental

Horticulture. In addition, Highland Drive is now depicted to the south of the CSU project site. Surrounding properties are depicted similar to the 1965 map with the exception of increased development on the Cal Poly campus and in surrounding areas.

- ***1994*** – The EHS project site appears similar to the 1979 topographic map with the exception of four additional structures and a corral depicted on the Equine Unit and twelve structures on Environmental Horticulture. One new structure is depicted on the eastern portion of the CSU project site. Surrounding properties are depicted similar to the 1979 map with the exception of increased development on the Cal Poly campus and in surrounding areas.

- ***1995*** – The Site and surrounding properties are depicted similar to the 1994 map.

- ***2012*** – Developed zoning and individual structure depictions have been removed from the topographic map. Via Carta, Mount Bishop Road and Highland Drive are labeled in the vicinity of the Site. The campus instructional core is depicted on the map as California Polytechnic State University San Luis Obispo Campus.

4.3 SANBORN® FIRE INSURANCE MAPS

Sanborn® Fire Insurance Maps provide historical land use information in some metropolitan areas and small, established towns. No Sanborn® Fire Insurance Map were available for the Site. A copy of the no coverage page is included in Appendix A.

4.4 CITY DIRECTORIES

Haro Environmental contacted EDR to obtain a historical City Directory Abstract, which lists the names and/or businesses that historically occupied an address. The City Directory Abstract, which covers the period from 1962 to 2013, provides tenant information for an address and/or adjoining streets. The Site was listed as Cal Poly and no specific building information was provided, and no environmentally sensitive listings for the Site or adjacent properties were noted in the city directory listings provided by EDR. The complete EDR City Directory Abstract listing results is provided in Appendix A.

4.5 OIL AND GAS MAPS

Maps provided online by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources were reviewed to determine the current or historic presence of oil or gas wells in the vicinity of the Site (DOGGR, 2003). The maps reviewed indicated there are no oil and gas wells located within a one-mile radius of the Site.

4.6 CHAIN OF TITLE RECORDS

Haro Environmental was provided and reviewed the Preliminary Title Report for the Site prepared by First American Title Company and dated September 29, 2008 (Appendix B). The Preliminary Title Report did not contain deed restrictions or land use controls related to environmental concerns.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

Haro Environmental's assessment activities included a site reconnaissance. This section summarizes the findings from the site reconnaissance.

5.1 SITE RECONNAISSANCE

5.1.1 Methodology and Limiting Conditions

Mr. Elliot Haro of Haro Environmental performed a reconnaissance of the Site on December 20 and 21, 2016 accompanied by Mr. Austin Creel, Project Manager with Cal Poly. The site reconnaissance was conducted by: 1) observing the Site from public thoroughfares, 2) observing the adjoining properties from public thoroughfares, 3) observing the interior of the onsite structures, 4) observing the exterior of the onsite structures, 5) backtracking to correlate exterior features with interior features, as necessary, and 6) observing the Site from walking paths. The purpose of the site reconnaissance was to identify the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or threat of release into soil, groundwater, or surface water at the Site (recognized environmental conditions). Observations from the site reconnaissance are summarized in the following sections. A photo log of photographs taken during the site reconnaissance is provided in Appendix C.

5.1.2 Current Use of the Property and Adjoining Properties

The northern portion of the Site is currently used as an equestrian facility and the EHS unit including classrooms, storage sheds, and greenhouses. The southwestern portion of the Site is used for the CSU including a greenhouse, storage containers, and agricultural operations.

Solid waste services are provided by the San Luis Garbage Company. Wastewater generated at the Site discharges to the sanitary sewer system. Potable and irrigation water is provided by off-site groundwater wells. Electricity is provided by PG&E and natural gas is supplied by The Gas Company.

Undeveloped land and agriculture land uses are present surrounding the Site. Site and adjoining land uses are depicted on Plate 2.

5.1.3 General Description of Structures

The Site is developed with multiple structures as follows:

- Equine Unit (EU): Multiple buildings area present including stalls and an open pavilion (Photos #20 and #21). No chemicals were observed within the EU.

- EHS: Multiple structures are present for classrooms, storage, and greenhouses. Chemical storage was observed and is discussed in Section 5.1.5

- CSU: One greenhouse, storage containers, and farm equipment are present here (Photos #22 through #28)

5.1.4 Interior and Exterior Observations

The interiors of the EU included infrastructure for horses.

The majority of the interiors at the EHS buildings were greenhouses, classrooms, and storage. Several sheds were observed at the eastern portion of the EHS unit used to store lawn mower and fuel. Significant quantities of pesticides and herbicides were observed and are discussed in Section 5.1.5.

The CSU included a greenhouse and several storage containers (Photos #22 and #23).

5.1.5 Hazardous Substances and Petroleum Products

Hazardous substances including pesticides and herbicides are stored in Building 048-M (Photos #4 through #7). In addition, chemical mixing is performed outside Building 048-M, under a canopy on concrete surface with a floor drain present. Reportedly, the floor drains at Building 048-M discharge into an onsite, approximately 1,500-gallon above ground storage tank (AST) located south of the Building 048-M (Photo #8 and #9). The environmental questionnaire completed by Mr. Featherstone indicated an evaporation pond was formerly present at the current location of the pesticide AST.

Gasoline and diesel fuel are stored at the EHS unit within chemical cabinets in two sheds and outside the wood shop (Photos # 10 and #12). No significant staining of the ground surface in the vicinity of the fuel storage was noted.

Approximately 20-gallon of phosphoric acid was observed within a storage shed at the CSU.

5.1.6 Unidentified Substance Containers

Unidentified hazardous substance containers or unidentified containers that might contain hazardous substances were not observed.

5.1.7 Storage Tanks

During the site reconnaissance, Haro Environmental did not observe evidence of USTs. One AST was observed and identified as the pesticide storage tank (Photos #8 and #9). This AST receives discharge from the floor drains at Building 048-M. This AST is periodically emptied by vacuum truck with the contents hauled off under manifest. Secondary containment was observed and no significant staining of the concrete surface beneath the AST was observed.

5.1.8 Odors

During the site reconnaissance, Haro Environmental did not identify any strong, pungent, or noxious odors.

5.1.9 Pools of Liquid

During the site reconnaissance, Haro Environmental did not identify any pools of liquid including standing surface water other than the on-site ponds. In addition, sumps containing liquids likely to be hazardous substances or petroleum products were not observed.

5.1.10 Drums

During the site reconnaissance, Haro Environmental several 55-gallon drums within the chemical storage Building 048-M (Photo #6).

5.1.11 Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Haro Environmental observed evidence of PCBs onsite associated with an oil-filled cutout (OFC) switch near the pad-mounted transformer at the EHS unit (Photo #15). The oil contained within this OFC switch was tested for PCBs and the results indicate it contains 62 parts per million (ppm) PCBs. A copy of documentation related to the testing of this OFC switch is provided in Appendix B.

A pole-mounted and a pad-mounted transformer was observed near the CSU (Photos #24 and #28), however, no leaks or staining of the soil surface within the vicinity of the transformers were noted.

Florescent light ballasts can be sources of PCBs. Mr. Tim Hastings, Cal Poly Health Specialist with Cal Poly, indicated a florescent light upgrade project was completed approximately 8 years ago and that all PCB-containing light ballasts were removed from the campus, including the project area.

5.1.12 Other Conditions of Concern

During the site reconnaissance Haro Environmental did not note any of the following:

- Corrosion
- Clarifiers, and/or sumps
- Stressed vegetation
- Waste water
- Storm drains
- Septic tanks

A wastewater pond identified as Drumm Reservoir was observed adjacent to the southeast of the northern portion of the project area.

5.2 INTERVIEWS

Mr. Featherstone was interviewed as part of this Phase I ESA to inquire about the current and historic uses of the Site.

Mr. Featherstone indicted that he was aware of the following:

- Current and previous pesticide handling and storage.
- Current and previous sacks of fertilizer in Building 048-D.
- Former evaporation pond near the present pesticide AST location. According to Mr. Featherstone, the evaporation pond used to collect rinsate from cleaning out chemical application equipment, and was not used to dispose of the residual chemicals in the application equipment or bulk chemicals.
- Pesticide AST south of Building 048-M.
- Pesticides and fertilizers at the Site.
- PCBs in electrical transformers.

Mr. Featherstone indicated that he is unaware of the current or historic presence, on-site, of:

- Industrial batteries,
- Fill dirt,
- Underground-ground storage tanks,
- Vent pipes, fill pipes, or access ways,
- Monitoring wells, or
- PCBs.

Mr. Featherstone also indicated that he is unaware of any environmental liens, environmental deed restrictions, land use regulations, engineering controls, environmental violations, environmental assessments, or past, threatened, or pending lawsuits concerning releases of hazardous materials relating to the Site.

6.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This Phase I ESA of the Oppenheimer Pavilion and Agricultural Events Center Project (the Project) located at the campus of California Polytechnic State University San Luis Obispo (Cal Poly) in San Luis Obispo, California (the Site) was performed by Haro Environmental for SWCA Environmental Consultants (SWCA). Haro Environmental performed this Phase I ESA consistent with ASTM Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). Exceptions to, or deletions from, this practice are described in this report.

Based on the data gathered and reviewed during this Phase I ESA, Haro Environmental did not identify recognized environmental conditions or concerns that have impacted, or pose a significant environmental threat to subsurface soil, soil vapor, or groundwater beneath the Site with the exception of the following:

- The handling of pesticides and herbicides at the EHS unit. The chemical handling and storage area is located at the south end of EHS, within Building 048-M. Pesticide and herbicide storage was not observed in any of the other EHS buildings. Chemical mixing occurs adjacent to the storage building under a covered area on concrete, with floor drains. Various types and quantities of pesticides and herbicides were observed and several floor drains were observed in the area of the chemical storage. The floor drains in the area reportedly discharge to an approximately 1,500-gallon AST located downslope from Building 048-M. The AST appears to have adequate secondary containment, and no evidence of spills or leaks were observed. Reportedly, this AST is emptied by a contractor under manifest on an as-needed basis. Therefore, the presence of this AST and chemical handling at Building 048-M is not expected to pose a significant environmental concern to the Project.

- Former evaporation pond near the current pesticide AST location. Reportedly, an evaporation pond was previously located in this area and used to collect rinsate from cleaning out chemical application equipment. This pond was reportedly not used to dispose of the residual chemicals in the application equipment or bulk chemicals. Because we have no evidence indicating this evaporation pond was used for anything other than rinsate from chemical application equipment, the former presence and use of an evaporation pond would not be expected to pose a significant environmental concern to the Project.

- Small quantities of diesel fuel and gasoline were observed at EHS, however, no significant spills or releases were observed in the area of fuel storage. Therefore, fuel storage is not expected to pose a significant environmental concern to the Project.

- The presence of phosphoric acid within a storage shed near the CSU. No staining of the surface beneath the phosphoric acid was observed. Therefore, this chemical handling is not expected to pose a significant environmental concern to the Project.

- Agricultural land use near the CSU. Agricultural land use for row crops can include the application of herbicides and/or pesticides which can accumulate in soil. Particularly banned substances (e.g., DDT) can persist in soil for long periods of time, even after their application has been stopped. Although we have no evidence indicating DDT was used at the CSU, agricultural soils may contain elevated levels of chemicals. Continued agricultural land use would not be expected to pose an environmental concern to the Project.

- Chemical handling and mixing at the CSU. Although pesticides and herbicides are stored at the CSU, this project area doesn't include the chemical storage area. However, chemical application equipment is stored within the project area and may a source of a release of agricultural chemicals to the environment.

- Electrical transformers. Several pad-mounted and one pole-mounted electrical transformers were observed within the project area. The pad mounted transformers appeared to be relatively new and would not be expected to contain PCBs. In addition, staining of the surface beneath the transformers, including the pole-mounted transformer, was noted. Therefore, the presence of transformers within the project area would not be expected to pose an environmental concern to the Project. An older OFC switch was observed at the EHS unit adjacent to a pad-mounted transformer. Reportedly, this OFC switch was tested for PCBs, and the results indicated the oil with this OFC switch contains 62 ppm PCBs. No visible staining of the concrete surface beneath the OFC switch was noted and it did not appear to be leaking fluid.

Based on the findings of this Phase I ESA, the following measures are recommended to avoid potential impacts associated with identified RECs:

- If construction of the proposed Project requires existing soils in the vicinity of the CSU, the existing pesticide AST, or the former evaporation pond to be removed and disposed of offsite, it is recommended that Cal Poly collect a limited number of soil samples from the area(s) and test them for pesticides, herbicides, and heavy metals to determine if the soils require special handling and disposal.

- Prior to demolition at the EHS unit, the OFC switch with the elevated PCBs should be removed and disposed of in accordance with all applicable rules and regulations.

7.0 STANDARD OF CARE

The findings and conclusions contained in this Phase I ESA are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted industry standards and practices applicable to this location and are subject to the following inherent limitations:

Accuracy of Information. Certain information utilized by Haro Environmental in this assessment has been obtained, reviewed, and evaluated from various sources believed to be reliable. Although Haro Environmental's conclusions, opinions, and recommendations are based, in part, on such information, Haro Environmental's services did not include the verification of the information's accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Haro Environmental reserves the right to amend or revise its conclusions, opinions and/or recommendations.

Reconnaissance. Haro Environmental performed a reconnaissance of the Site that is the subject of this assessment to document current conditions. Haro Environmental focused on areas deemed more likely to exhibit hazardous materials conditions while other areas received limited attention. No known areas were inaccessible at the time of our reconnaissance.

Limitations. Haro Environmental does not guarantee that the Site is free of hazardous or potentially hazardous materials or conditions, or that latent or undiscovered conditions will not become evident in the future. This assessment has been prepared in accordance with currently accepted industry standards, and no other warranties, representations, or certifications are made. Unless stated otherwise herein, this report is intended for and restricted to the sole use of SWCA and Cal Poly. Any other use, interpretation, or reliance upon this assessment is at the sole risk of the user and Haro Environmental shall have no liability for such unauthorized use, interpretation or reliance.

Qualifications of Environmental Professionals. Mr. Elliot Haro representing Haro Environmental performed this ESA. Mr. Haro is an environmental consultant who has performed over 100 ESAs for a variety of clients. Mr. Haro's resume is provided in Appendix D.

Reliance. This ESA report has been prepared for the exclusive use and reliance of SWCA and Cal Poly. Use or reliance by any other party is prohibited without the written authorization of SWCA, Cal Poly and Haro Environmental.

Scope Limitations and ASTM Exceptions. This ESA did not include any inquiries with respect to non-scope ASTM considerations (including but not limited to asbestos containing materials, radon gas, lead-based paint, lead in drinking water, mold, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality or electromagnetic fields), subsurface or other invasive assessments, business environmental risk evaluations or other services not particularly identified and discussed herein.

Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested may not be received by the issuance date of the report. In the event information obtained from sources mentioned previously alters the findings stated in this report, an addendum letter will be forwarded to SWCA and Cal Poly under separate cover providing Haro Environmental's findings and conclusions. Additional Phase I ESA limitations include:

- Several data gaps since 1940 of greater than 5 years were identified in the historical records reviewed and included the years from 1942 to 1949, from 1952 to 1963, from 1965 to 1971, from 1981 to 1983, from 1987 to 1991, and from 1995 to 2005. These data gaps are considered insignificant because the Site was developed in 1985, and the use appears to be similar during the remaining data gaps.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the Site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable or not present during the reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

Certification. I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of this part [40 CFR Part 312]. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

8.0 REFERNCES

California Department of Conservation, California Geological Survey (CGS). 2002. *California Geomorphic Provinces – Note 36.*

CGS. 2010. *Geologic Map of the San Luis Obispo 7.5 Minute Quadrangle*. Version 1.0 by Mark O. Wiegers.

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California Department of Water Resources (DWR). 1975. *San Luis Obispo Valley Groundwater Basin. California's Groundwater Bulletin No. 118. Last updated February 27, 2004.*

Environmental Data Resources (EDR). December 13, 2016. EDR Historical Topographic Map Report, Cal Poly Oppenheimer, 1 Grand Avenue, San Luis Obispo, CA 93405.

EDR. December 14, 2016. The EDR Aerial Photo Decade Package, Cal Poly Oppenheimer, 1 Grand Avenue, San Luis Obispo, CA 93405.

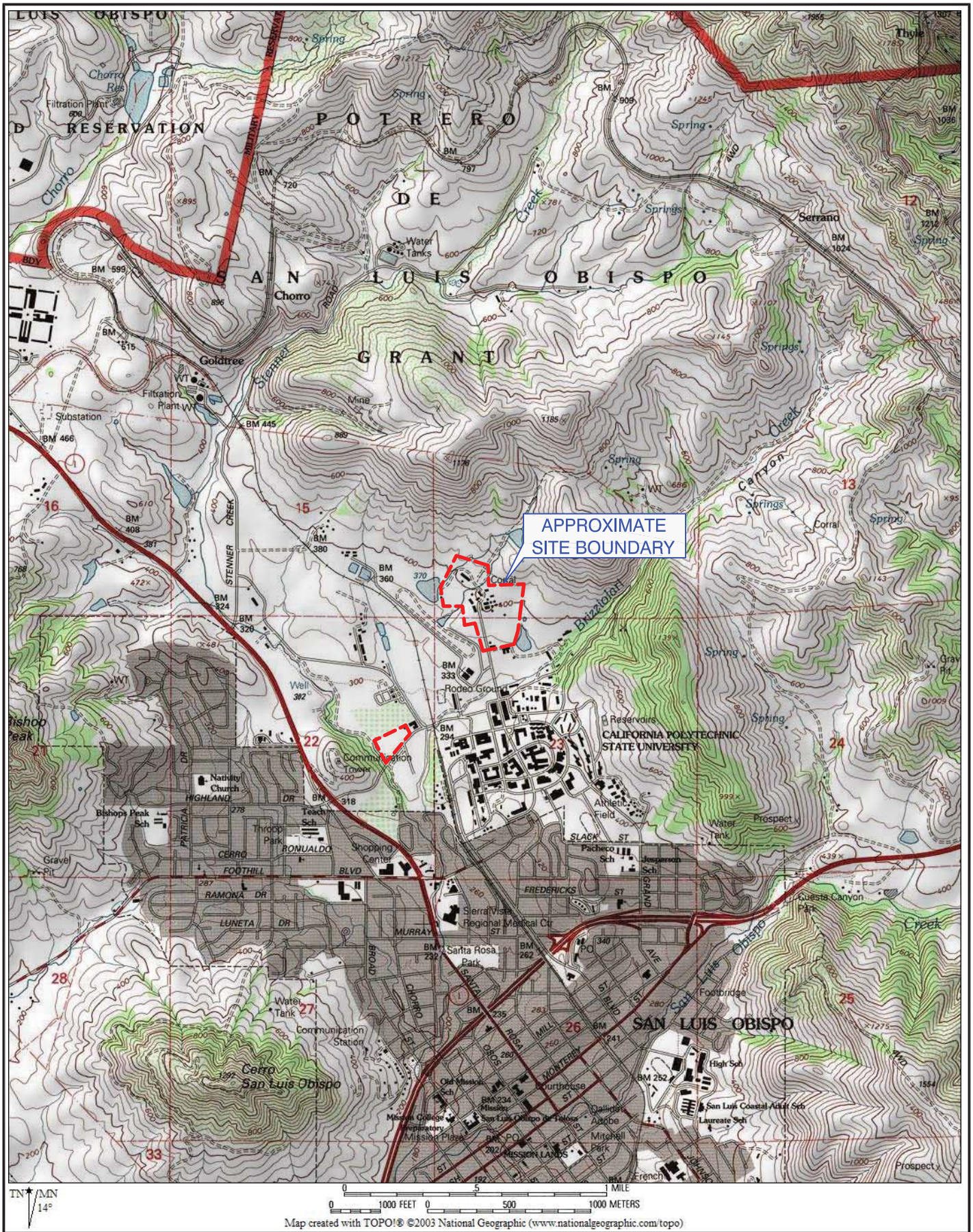
EDR. December 13, 2016. The EDR Sanborn® Map Report, Cal Poly Oppenheimer, 1 Grand Avenue, San Luis Obispo, CA 93405.

EDR. December 17, 2016. The EDR-City Directory Image Report, Cal Poly Oppenheimer, 1 Grand Avenue, San Luis Obispo, CA 93405.

EDR. December 14, 2016. The EDR Radius Map with GeoCheck®, Cal Poly Oppenheimer, 1 Grand Avenue, San Luis Obispo, CA 93405.

United States Fish and Wildlife Service (USFWS). 2014. National Wetlands Inventory Map. Online at http://www.fws.gov/wetlands/Data/Mapper.html.

PLATES



HARO ENVIRONMENTAL
1065 Higuera St. Suite 301
San Luis Obispo, CA 93401
Phone: 805 204 4483
Fax: 805 831 6081

FILE NAME: *SITE VICINITY MAP.DWG*

SITE VICINITY MAP

Cal Poly Oppenheimer
San Luis Obispo, California

PLATE: 1
SHEET: of
REVISION NO: 0
DATE: 01/17

HARO ENVIRONMENTAL
1065 Higuera Street, Suite 301
San Luis Obispo, California 93401
Phone: 805.204.4483
Fax: 805.832.6081

SALU MAP.dwg

SITE AND ADJACENT LAND USE MAP

Cal Poly Oppenheimer Project
San Luis Obispo, California

PLATE: 2

REVISION NO:

DATE: 01/17

HARO ENVIRONMENTAL
1065 Higuera Street, Suite 301
San Luis Obispo, California 93401
Phone: 805.204.4483
Fax: 805.832.6081

SALU MAP.dwg

SITE DETAIL MAP 1

Cal Poly Oppenheimer Project
San Luis Obispo, California

PLATE: 3

REVISION NO:

DATE: 01/17

HARO ENVIRONMENTAL
1065 Higuera Street, Suite 301
San Luis Obispo, California 93401
Phone: 805.204.4483
Fax: 805.832.6081

SALU MAP.dwg

SITE DETAIL MAP 2

Cal Poly Oppenheimer Project
San Luis Obispo, California

PLATE: 4

REVISION NO:

DATE: 01/17

APPENDIX A

REGULATORY RECORDS DOCUMENTATION

Cal Poly Oppenheimer

1 Grand Avenue

San Luis Obispo, CA 93405

Inquiry Number: 4805634.3

December 13, 2016

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

12/13/16

Site Name:	Client Name:
Cal Poly Oppenheimer	Haro Environmental, Inc.
1 Grand Avenue	PO Box 7002
San Luis Obispo, CA 93405	Los Osos, CA 93412
EDR Inquiry # 4805634.3	Contact: Elliot Haro

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Haro Environmental, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 0194-4601-AE54

PO # NA

Project NA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 0194-4601-AE54

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

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Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405

Inquiry Number: 4805634.4
December 13, 2016

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

12/13/16

Site Name:

Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405
EDR Inquiry # 4805634.4

Client Name:

Haro Environmental, Inc.
PO Box 7002
Los Osos, CA 93412
Contact: Elliot Haro

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Haro Environmental, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: NA

Coordinates:

Latitude:	35.308916 35° 18' 32" North
Longitude:	-120.662248 -120° 39' 44" West
UTM Zone:	Zone 10 North
UTM X Meters:	712538.65
UTM Y Meters:	3909808.48
Elevation:	392.69' above sea level

Maps Provided:

2012	1897
1995	
1994	
1979	
1965	
1952	
1942	
1900	

Topo Sheet Key

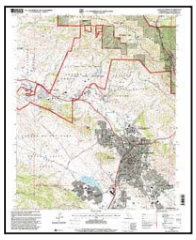
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

San Luis Obispo

7.5-minute, 24000

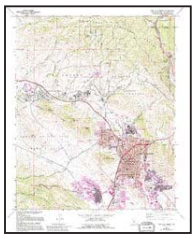
1995 Source Sheets



San Luis Obispo

7.5-minute, 24000
Edited 1995

1994 Source Sheets



San Luis Obispo

7.5-minute, 24000
Aerial Photo Revised 1988
Edited 1994

1979 Source Sheets

San Luis Obispo

7.5-minute, 24000
Photo Revised 1979
Aerial Photo Revised 1976

Topo Sheet Key

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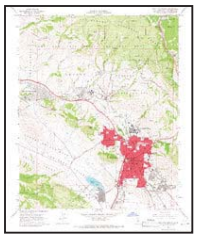
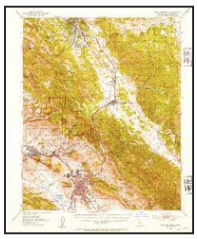


San Luis Obispo

7.5-minute, 24000
Aerial Photo Revised 1963

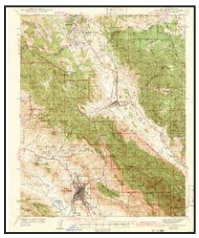
1952 Source Sheets



San Luis Obispo

15-minute, 62500

1942 Source Sheets



San Luis Obispo

15-minute, 62500

1900 Source Sheets

San Luis

30-minute, 125000

Topo Sheet Key

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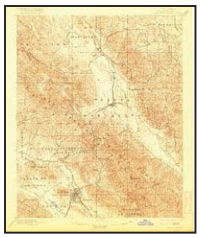
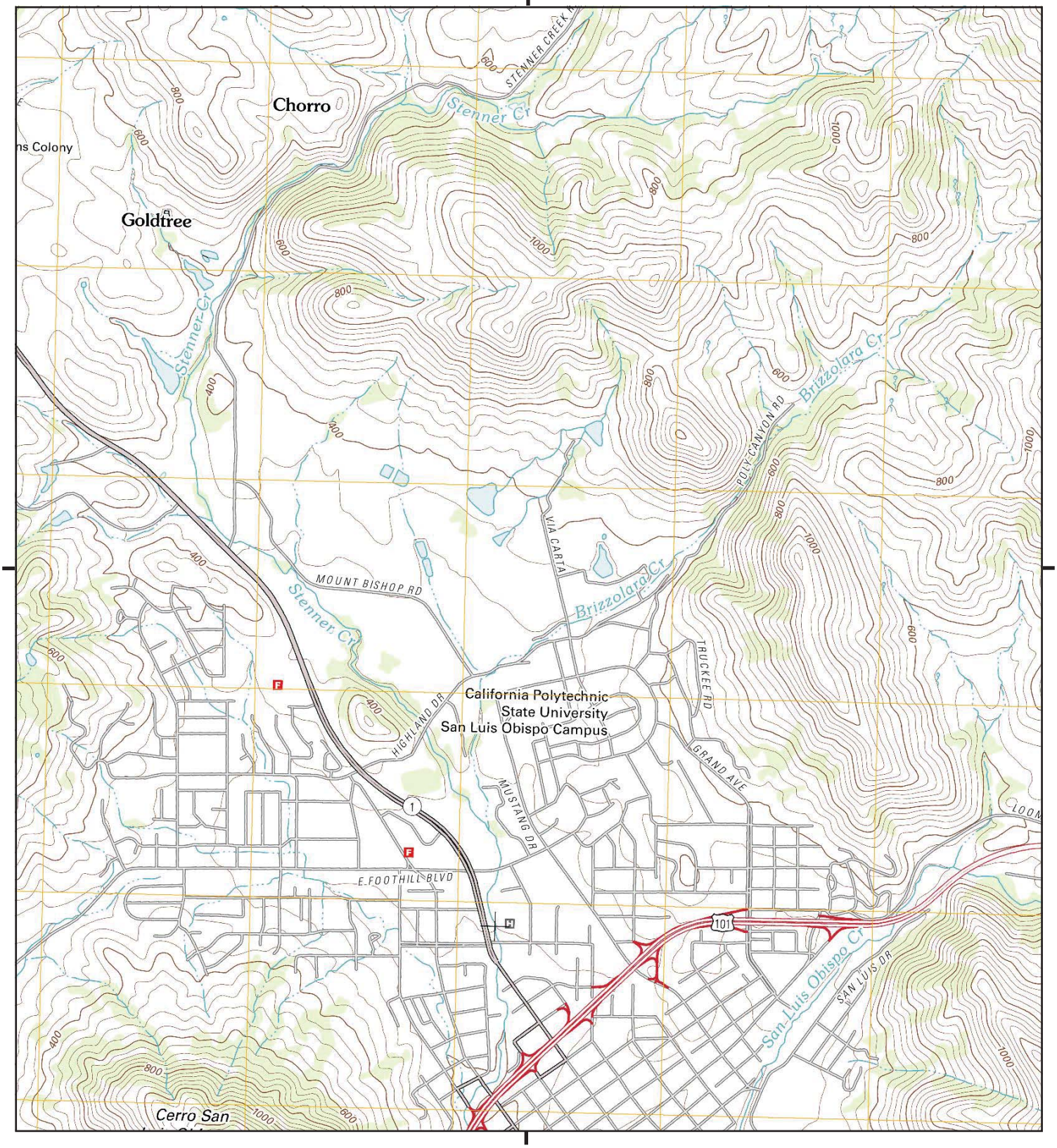


San Luis Obispo

15-minute, 62500

Historical Topo Map

2012



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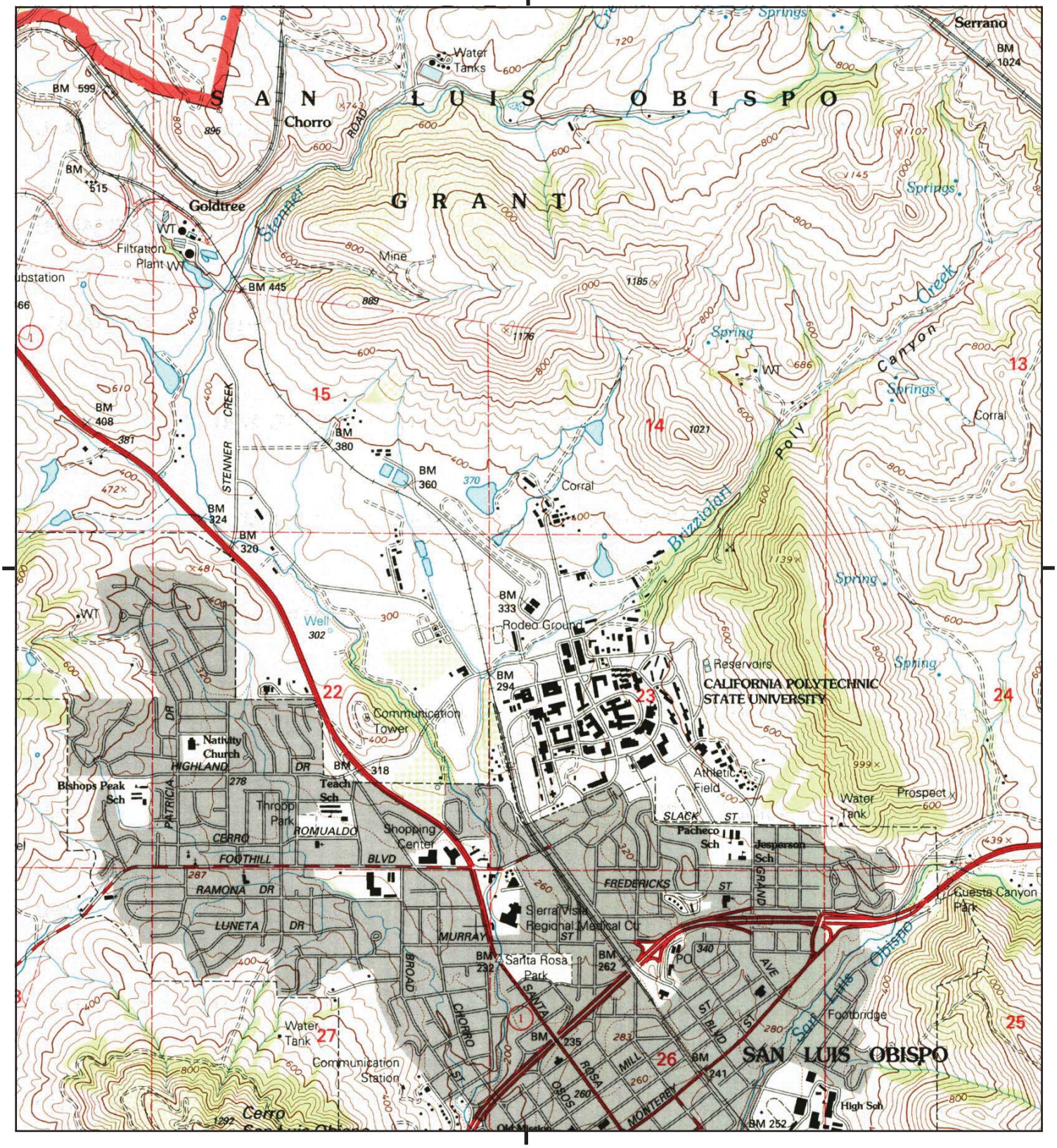
NW N NE
W E
SW S SE

TP, San Luis Obispo, 2012, 7.5-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



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W E
SW S SE

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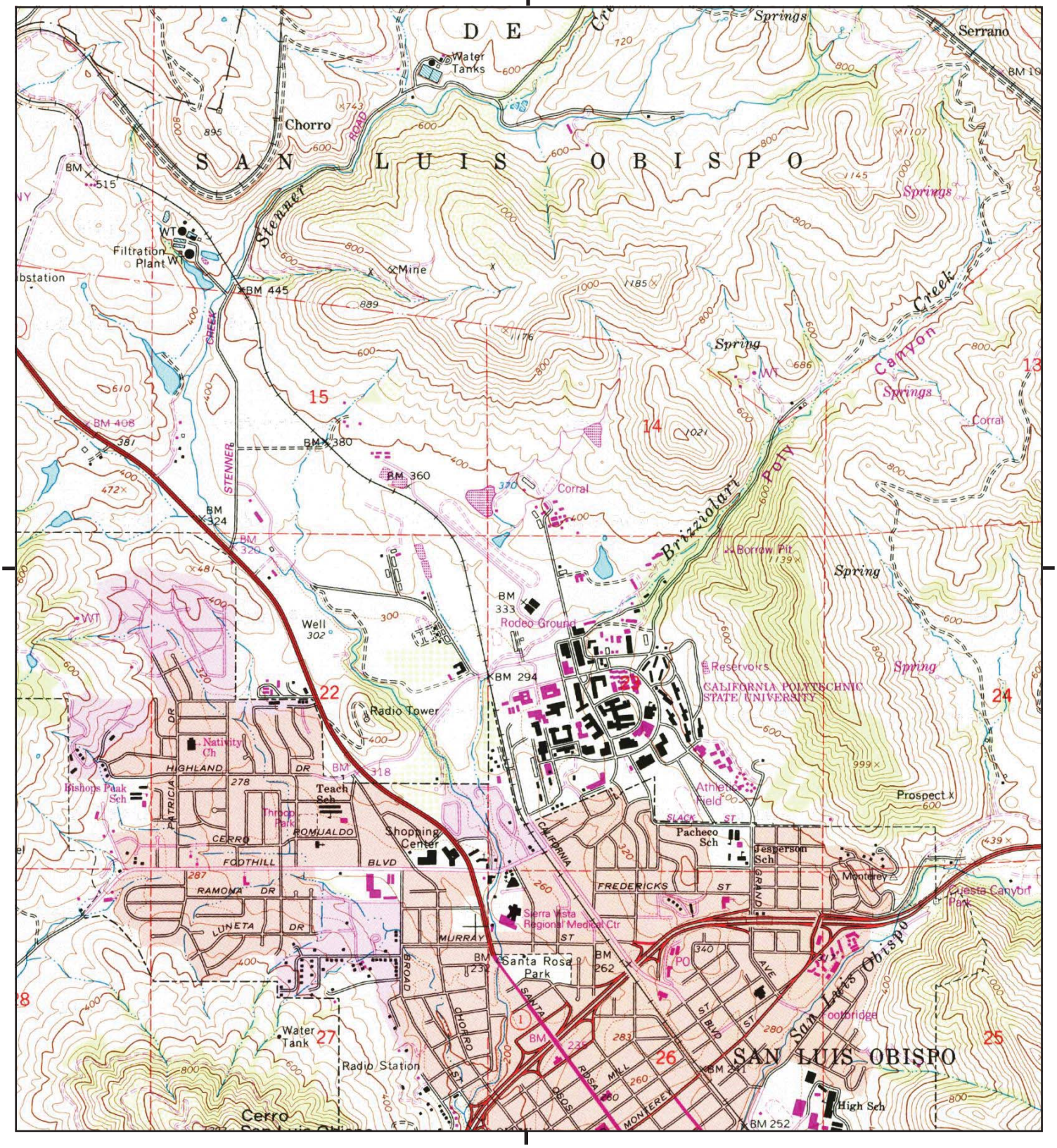
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



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SW S SE

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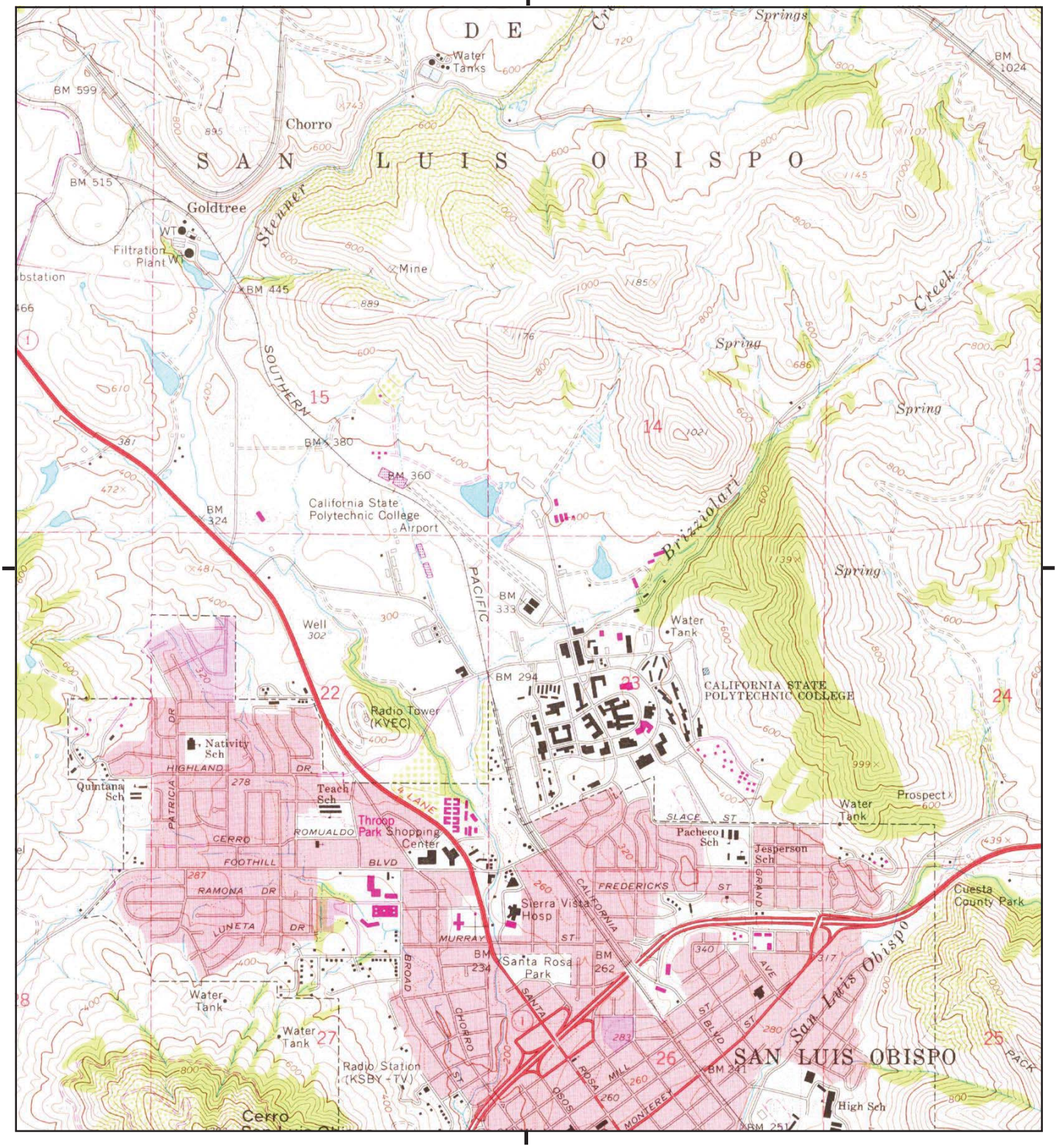
SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



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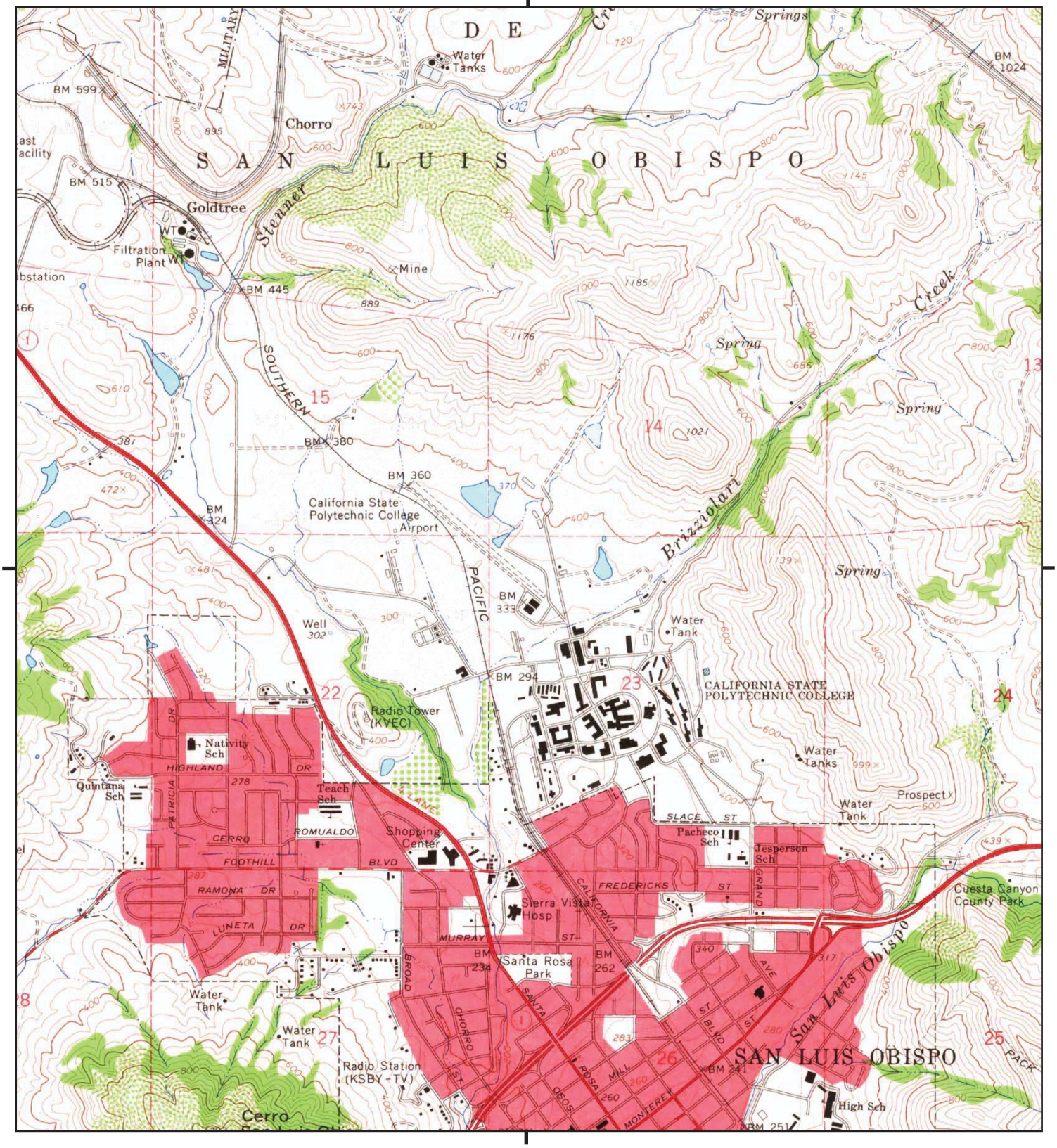
NW N NE
W E
SW S SE

TP, San Luis Obispo, 1979, 7.5-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



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SW S SE

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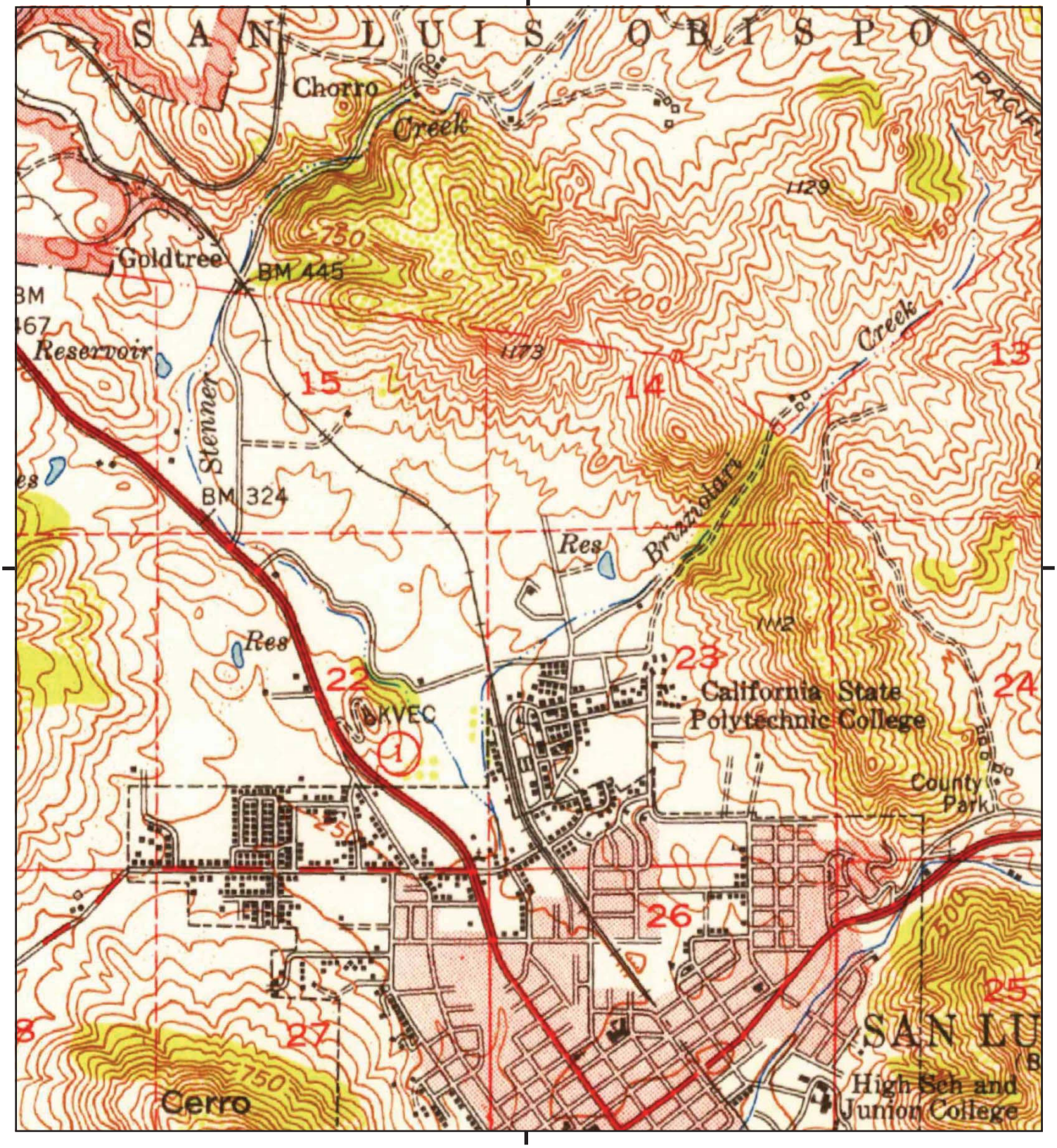
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

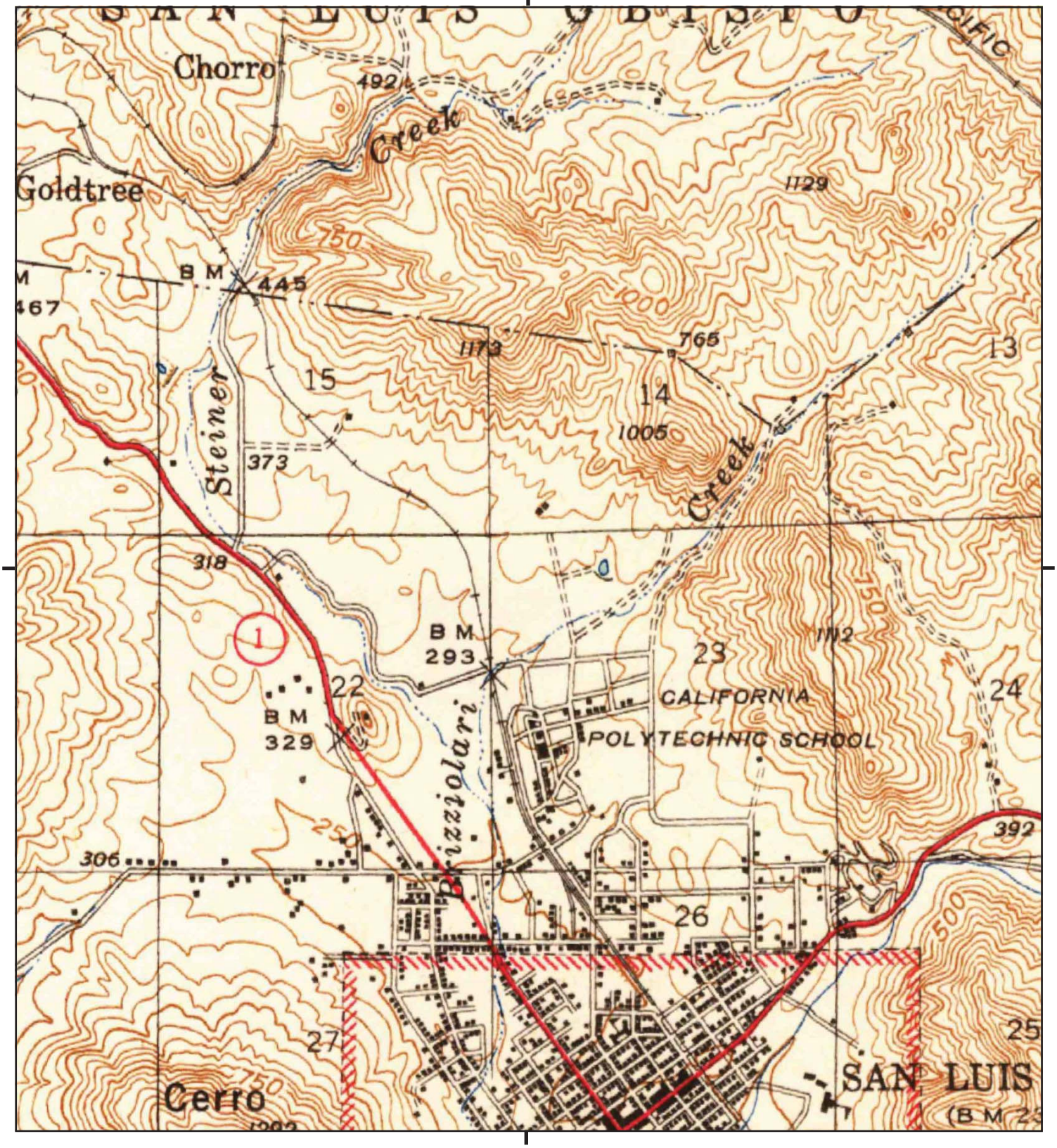
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Luis Obispo, 1952, 15-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

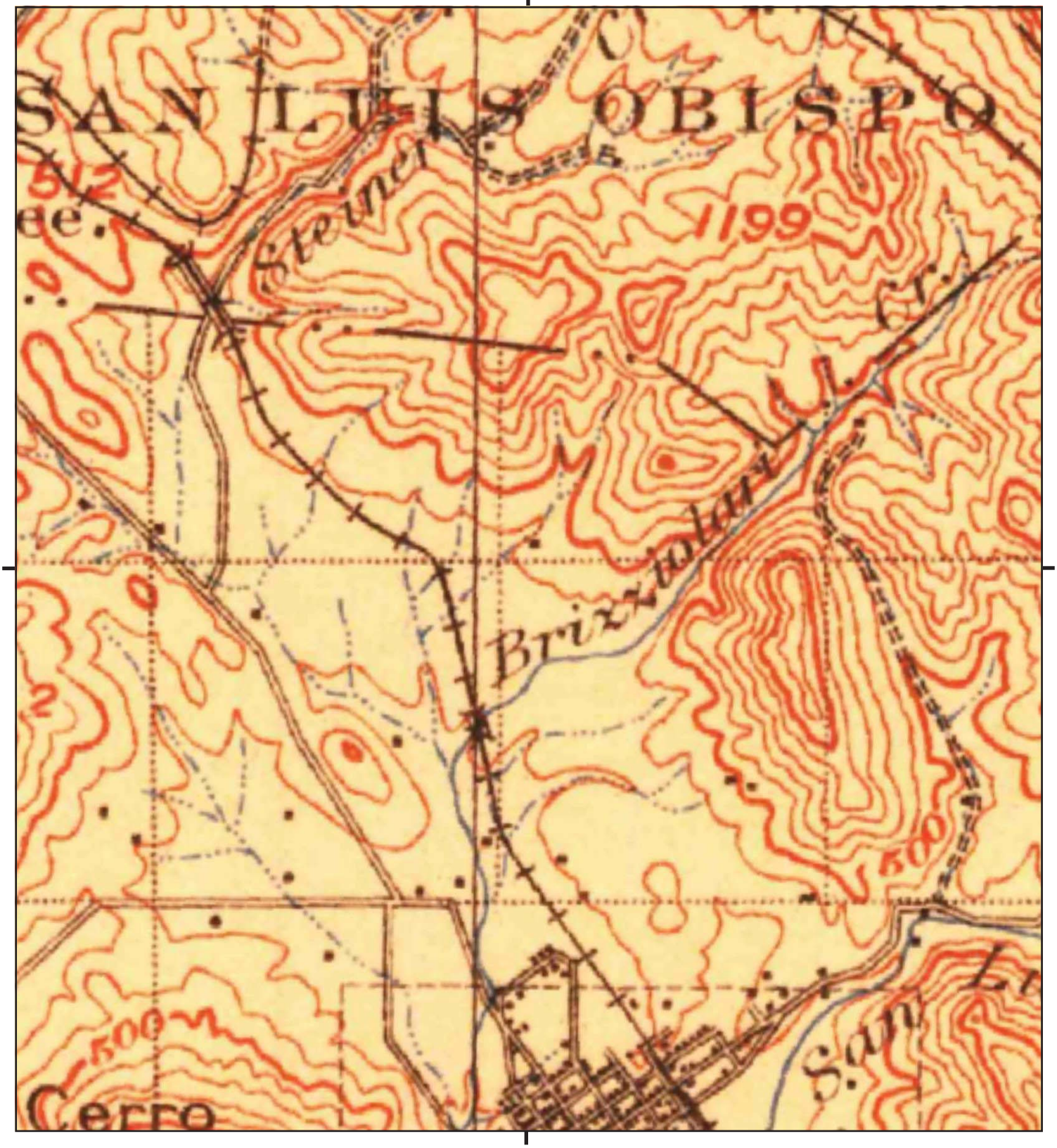
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Luis Obispo, 1942, 15-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



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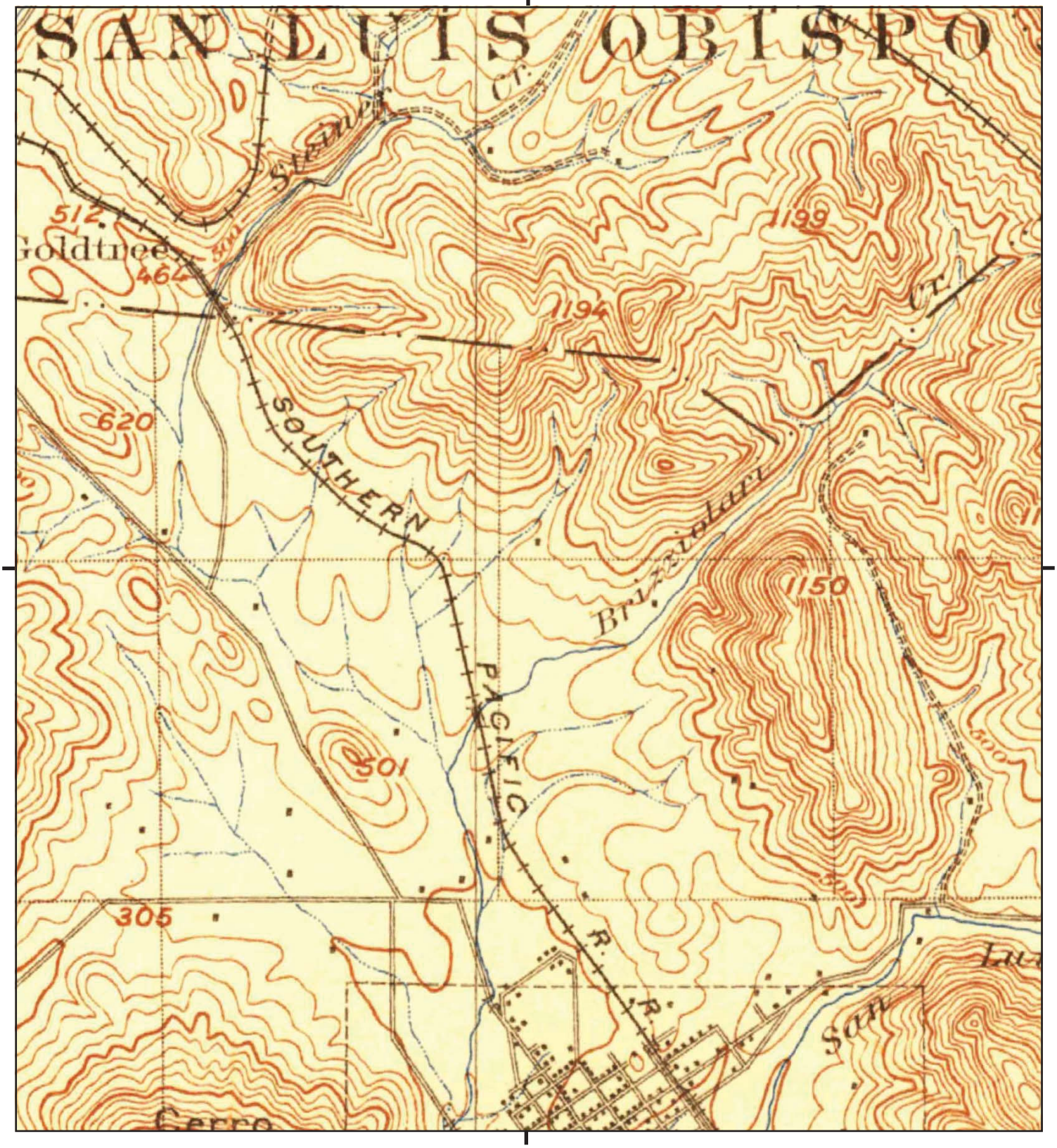
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Luis, 1900, 30-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, San Luis Obispo, 1897, 15-minute

SITE NAME: Cal Poly Oppenheimer
ADDRESS: 1 Grand Avenue
San Luis Obispo, CA 93405
CLIENT: Haro Environmental, Inc.

N

Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405

Inquiry Number: 4805634.9
December 14, 2016

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

12/14/16

Site Name:

Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405
EDR Inquiry # 4805634.9

Client Name:

Haro Environmental, Inc.
PO Box 7002
Los Osos, CA 93412
Contact: Elliot Haro

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: September 03, 1994	USGS/DOQQ
1987	1"=500'	Flight Date: January 01, 1987	USGS
1981	1"=500'	Flight Date: August 01, 1981	USDA
1976	1"=500'	Flight Date: January 01, 1976	USGS
1963	1"=500'	Flight Date: January 01, 1963	USGS
1960	1"=500'	Flight Date: January 01, 1960	USAF
1949	1"=500'	Flight Date: April 03, 1949	USDA
1939	1"=500'	Flight Date: January 01, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

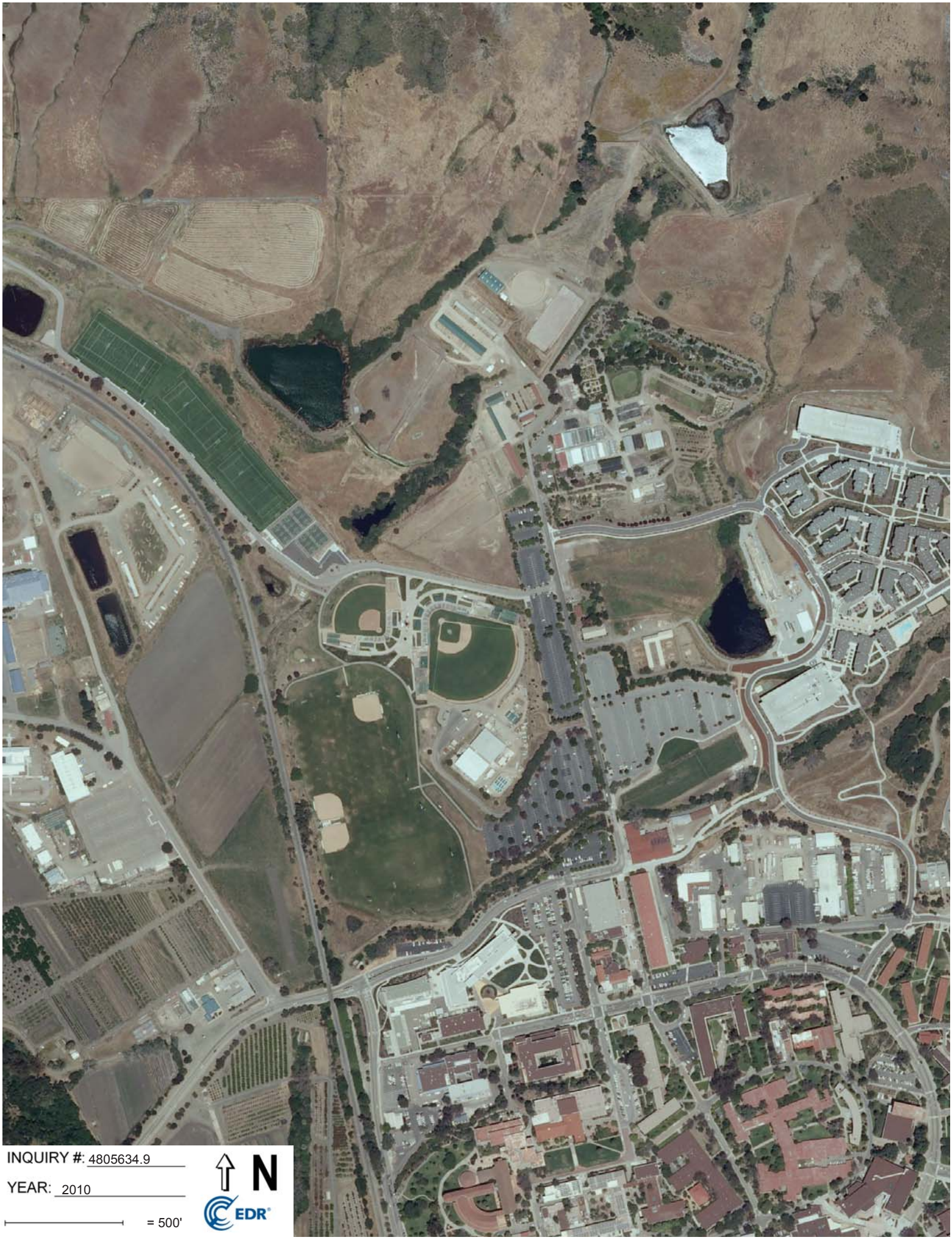
INQUIRY #: 4805634.9

YEAR: 2012

= 500'

N

EDR



INQUIRY #: 4805634.9

YEAR: 2010

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 2009

= 500'

N

EDR


INQUIRY #: 4805634.9
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 4805634.9

YEAR: 2005

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 1994

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 1987

= 500'

N

EDR


INQUIRY #: 4805634.9
YEAR: 1981
= 500'
N
EDR

INQUIRY #: 4805634.9

YEAR: 1976

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 1963

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 1960

= 500'

N

EDR

INQUIRY #: 4805634.9

YEAR: 1949

= 500'

N

EDR


INQUIRY #: 4805634.9
YEAR: 1939
= 500'
N
EDR

Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405

Inquiry Number: 4805634.2s
December 14, 2016

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1 GRAND AVENUE
SAN LUIS OBISPO, CA 93405

COORDINATES

Latitude (North):	35.3089160 - 35° 18' 32.09''
Longitude (West):	120.6622480 - 120° 39' 44.09''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	712543.6
UTM Y (Meters):	3909610.0
Elevation:	394 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5629228 SAN LUIS OBISPO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140604
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1 GRAND AVENUE
SAN LUIS OBISPO, CA 93405

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CAL POLY STATE UNIVE	1 GRAND AVENUE, BLDG	EMI		TP
A2	CAL POLY GRAND AVE H	1 GRAND AVE	CHMIRS, CUPA Listings, ENF, HAZNET, NPDES		TP
A3		CAL POLY - BUILDING	CHMIRS		TP
A4	KELLY L IVORS	1 GRAND AVE	PEST LIC		TP
A5	CALIFORNIA POLYTECHN	1 GRAND AVENUE	FINDS		TP
A6		BUILDING 186 CAL POL	CHMIRS		TP
A7		RELEASE STARTED AT 1	CHMIRS		TP
A8		CAL POLY - BUILDING	CHMIRS		TP
9	CAL POLY UNIVERSITY	HIGHLAND DRIVE/VIA C	LUST	Lower	360, 0.068, South
10	CA POLY STATE	GRAND AVE-RISK MGMT	UST, ICIS, US AIRS	Lower	487, 0.092, SE
B11	BREEZE GAS & MINI MA	796 FOOTHILL BOULEVA	Notify 65	Lower	2960, 0.561, SSW
B12	BREEZE GAS & MINI MA	796 FOOTHILL BOULEVA	Notify 65	Lower	2960, 0.561, SSW
13		510 A HATHAWAY	Notify 65	Lower	4562, 0.864, South
C14		GRAND AND LOOMIS AVE	Notify 65	Lower	5110, 0.968, SSE
C15		GRAND AND LOOMIS AVE	Notify 65	Lower	5110, 0.968, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CAL POLY STATE UNIVE 1 GRAND AVENUE, BLDG SAN LUIS OBISPO, CA 93407	EMI Facility Id: 24	N/A
CAL POLY GRAND AVE H 1 GRAND AVE SAN LUIS OBISPO, CA 93407	CHMIRS OES Incident Number: 13-5791 CUPA Listings Database: CUPA SAN LUIS OBISPO, Date of Government Version: 08/18/2016 Facility Id: FA0002572 Status: Inactive, non-billable Status: Active, billable Status: Active, exempt from billing ENF Status: Active Status: Historical Status: Active Facility Id: 804781 HAZNET GEPAID: CAC002598725 NPDES Facility Status: Active	N/A
CAL POLY - BUILDING CAL POLY - BUILDING SAN LUIS OBISPO, CA	CHMIRS OES Incident Number: 13-5793	N/A
KELLY L IVORS 1 GRAND AVE SAN LUIS OBISPO, CA 93407	PEST LIC	N/A
CALIFORNIA POLYTECHN 1 GRAND AVENUE SAN LUIS OBISPO, CA 93410	FINDS	N/A
BUILDING 186 CAL POL BUILDING 186 CAL POL SAN LUIS OBISPO, CA 93407	CHMIRS OES Incident Number: 4-1577	N/A
RELEASE STARTED AT 1 RELEASE STARTED AT 1 SAN LUIS OBISPO, CA	CHMIRS	N/A

EXECUTIVE SUMMARY

OES Incident Number: 4-0720

CAL POLY - BUILDING
CAL POLY - BUILDING
SAN LUIS OBISPO, CA 93407

CHMIRS
OES Incident Number: 4-1086

N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

EXECUTIVE SUMMARY

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ---------- EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing

INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data

COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS	Cleaner Facilities
Financial Assurance	Financial Assurance Information Listing
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
PROC	Certified Processors Database
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
FUELS PROGRAM	EPA Fuels Program Registered Listing
ABANDONED MINES	Abandoned Mines
ICE	ICE
ECHO	Enforcement & Compliance History Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAL POLY UNIVERSITY	HIGHLAND DRIVE/VIA C	S 0 - 1/8 (0.068 mi.)	9	23
Database: LUST, Date of Government Version: 09/12/2016				
Status: Completed - Case Closed				
Global Id: T0607999963				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA POLY STATE	***GRAND AVE-RISK MGMT***	***SE 0 - 1/8 (0.092 mi.)***	***10***	***31***
Database: UST, Date of Government Version: 09/12/2016				
Facility Id: FA0002572				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources

Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/10/2015 has revealed that there are 5 Notify 65 sites within approximately 1 mile of the target property.

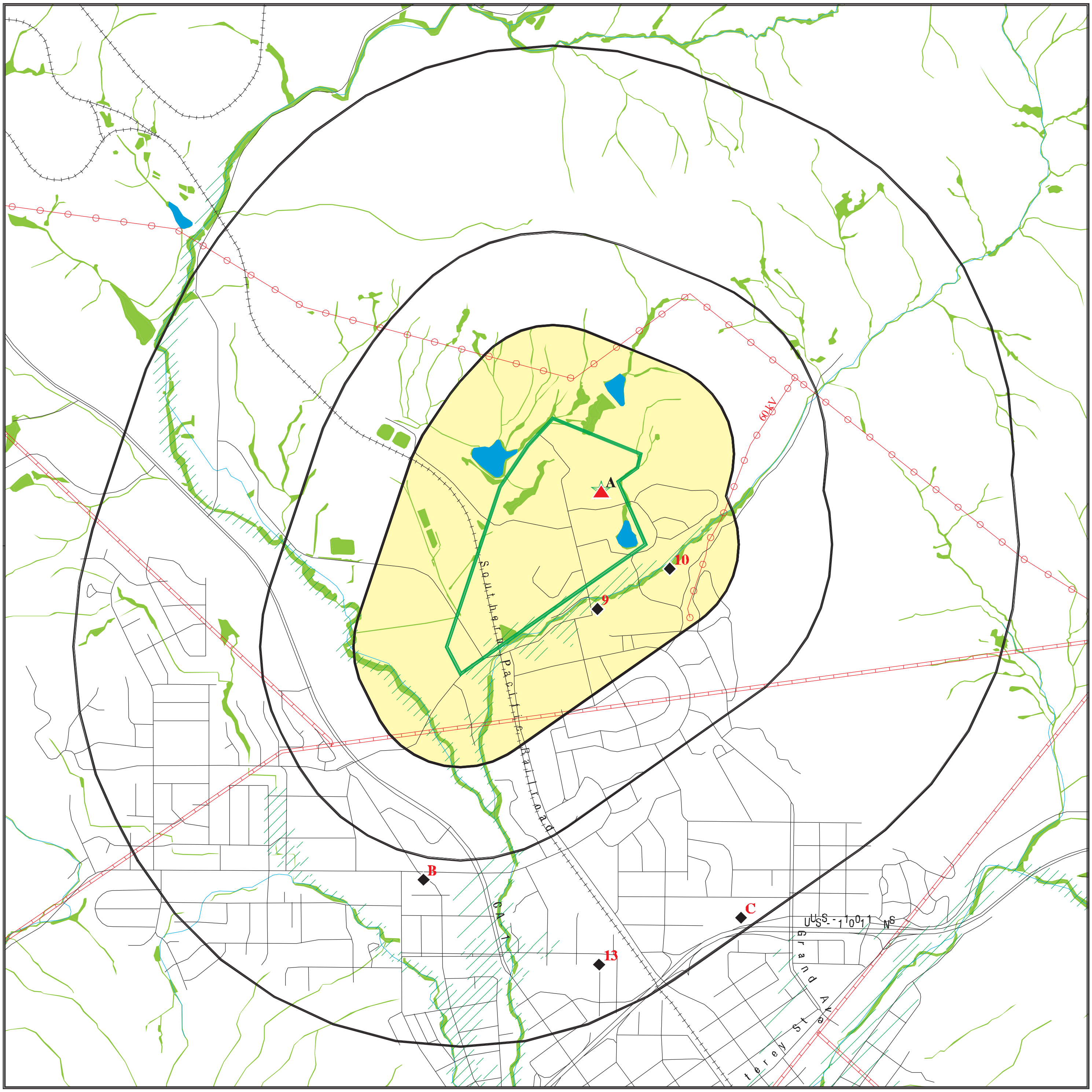
Lower Elevation	Address	Direction / Distance	Map ID	Page
BREEZE GAS & MINI MA	796 FOOTHILL BOULEVA	SSW 1/2 - 1 (0.561 mi.)	B11	106
BREEZE GAS & MINI MA	796 FOOTHILL BOULEVA	SSW 1/2 - 1 (0.561 mi.)	B12	106
Not reported	510 A HATHAWAY	S 1/2 - 1 (0.864 mi.)	13	106
Not reported	GRAND AND LOOMIS AVE	SSE 1/2 - 1 (0.968 mi.)	C14	107
Not reported	GRAND AND LOOMIS AVE	SSE 1/2 - 1 (0.968 mi.)	C15	107

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
CAL POLY UNIVERSITY FARM SHOP	RGA LUST
CAL POLY UNIVERSITY FARM SHOP	RGA LUST
CAL POLY UNIVERSITY FARM SH	RGA LUST
CAL POLY UNIVERSITY FARM SHOP	LUST

OVERVIEW MAP - 4805634.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

0 1/4 1/2 1 Miles

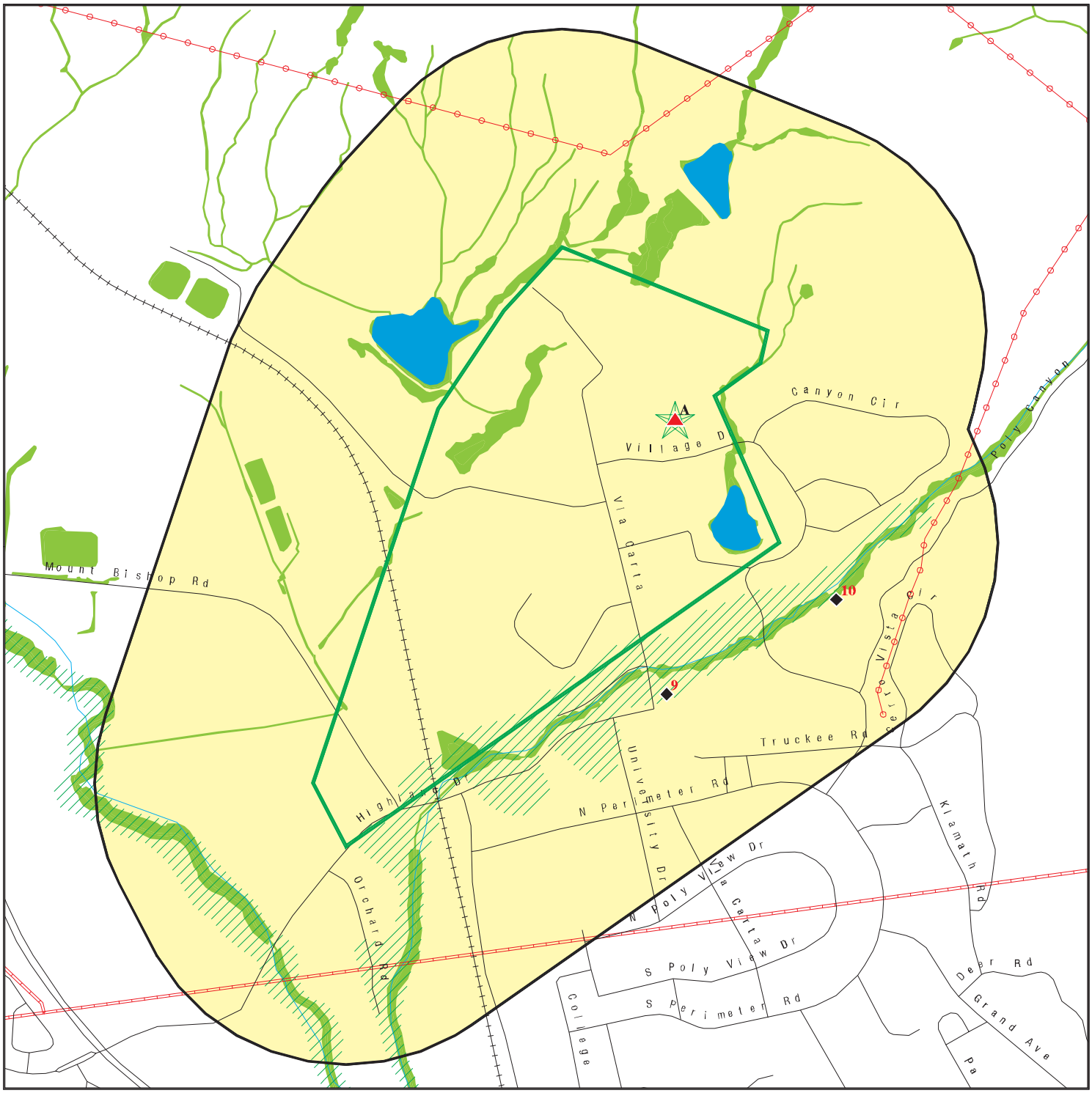
Indian Reservations BIA
Power transmission lines
Pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Cal Poly Oppenheimer	CLIENT:	Haro Environmental, Inc.
ADDRESS:	1 Grand Avenue	CONTACT:	Elliot Haro
	San Luis Obispo CA 93405	INQUIRY #:	4805634.2s
LAT/LONG:	35.308916 / 120.662248	DATE:	December 14, 2016 8:30 am

DETAIL MAP - 4805634.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Cal Poly Oppenheimer	CLIENT: Haro Environmental, Inc.
ADDRESS: 1 Grand Avenue San Luis Obispo CA 93405	CONTACT: Elliot Haro
LAT/LONG: 35.308916 / 120.662248	INQUIRY #: 4805634.2s DATE: December 14, 2016 8:30 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001	5	0	NR	NR	NR	NR	5
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250	1	0	0	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001	1	0	NR	NR	NR	NR	1
ENF	0.001	1	0	NR	NR	NR	NR	1
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001	1	0	NR	NR	NR	NR	1
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
PEST LIC	0.001	1	0	NR	NR	NR	NR	1
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	5	NR	5
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		12	2	0	0	5	0	19

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
CAL POLY STATE UNIVERSITY
1 GRAND AVENUE, BLDG. 80
SAN LUIS OBISPO, CA 93407

EMI **S118494652**
N/A

Site 1 of 8 in cluster A

Actual: 394 ft.

EMI:

Year:	2014
County Code:	40
Air Basin:	SCC
Facility ID:	24
Air District Name:	SLO
SIC Code:	8221
Air District Name:	SAN LUIS OBISPO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3.3987046994
Reactive Organic Gases Tons/Yr:	2.211344815
Carbon Monoxide Emissions Tons/Yr:	7.8851361
NOX - Oxides of Nitrogen Tons/Yr:	4.7461331
SOX - Oxides of Sulphur Tons/Yr:	0.0729861
Particulate Matter Tons/Yr:	1.0885849
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.9361940752

A2
Target Property
CAL POLY GRAND AVE HOUSING SOUTH
1 GRAND AVE
SAN LUIS OBISPO, CA 93407

CHMIRS **S112950388**
CUPA Listings **N/A**
ENF
HAZNET
NPDES

Site 2 of 8 in cluster A

Actual: 394 ft.

CHMIRS:

OES Incident Number:	13-5791
OES notification:	09/16/2013
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Waterway Involved:	Yes
Waterway:	Stenner Creek > San Louis Obispo Creek
Spill Site:	School
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	930
Year:	2013
Agency:	Water Quality Cal Poly
Incident Date:	9/16/2013
Admin Agency:	San Luis Obispo City Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Stenner Creek > San Louis Obispo Creek
E Date:	Not reported
Substance:	Treated Hot Water
Quantity Released:	5,000-30,000
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller is reporting a catastrophic failure of the Hot Water System. A water main at the central plant broke.

CUPA SAN LUIS OBISPO:

Facility Id:	FA0002572
Program Element Code:	0200
Program Element:	CALARP (CAL ACCIDENTAL RELEASE PROGRAM)
Record Id:	PR0008252
Cross Street:	Not reported
Status Code:	02
Status:	Inactive, non-billable
Latitude:	35.299308
Longitude:	-120.627586

Facility Id:	FA0002572
Program Element Code:	0205
Program Element:	CALARP SURCHARGE
Record Id:	PR0008253
Cross Street:	Not reported
Status Code:	02

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Status: Inactive, non-billable
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 0301
Program Element: UST FACILITY ANNUAL PERMIT
Record Id: PR0002564
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 0728
Program Element: HAZMAT DISCLOSURE - 11+ HAZARDOUS MATERIALS
Record Id: PR0001934
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 1000
Program Element: HAZWASTE GEN (RCRA-LQG)
Record Id: PR0010365
Cross Street: Not reported
Status Code: 04
Status: Active, exempt from billing
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 1126
Program Element: HAZWASTE GEN (1-5 WASTE STREAMS)
Record Id: PR0002482
Cross Street: Not reported
Status Code: 01
Status: Active, billable
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 1135
Program Element: CUPA FINE - HAZWASTE GEN
Record Id: PR0011408
Cross Street: Not reported
Status Code: 02
Status: Inactive, non-billable
Latitude: 35.299308
Longitude: -120.627586

Facility Id: FA0002572
Program Element Code: 1201
Program Element: AGT ANNUAL TANK PERMIT

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Record Id:	PR0011086
Cross Street:	Not reported
Status Code:	01
Status:	Active, billable
Latitude:	35.299308
Longitude:	-120.627586

ENF:

Region:	3
Facility Id:	804781
Agency Name:	California Polytechnic State University - San Luis Obispo
Place Type:	Utility
Place Subtype:	Water Treatment Plant
Facility Type:	Industrial
Agency Type:	State Agency
# Of Agencies:	1
Place Latitude:	35.302830
Place Longitude:	-120.658840
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	395427
Reg Measure Type:	Unregulated
Region:	3
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Status Date:	03/21/2014
Effective Date:	09/16/2013
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	399524
Region:	3
Order / Resolution Number:	R3-2014-0048
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	12/03/2014
Adoption/Issuance Date:	12/03/2014
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	CAO R3-2014-0048 for Cal Poly St Univ SLO Utilidor Heating System
Description:	Not reported
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	4/14/2015
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	3
Facility Id:	804781
Agency Name:	California Polytechnic State University - San Luis Obispo
Place Type:	Utility
Place Subtype:	Water Treatment Plant
Facility Type:	Industrial
Agency Type:	State Agency
# Of Agencies:	1
Place Latitude:	35.302830
Place Longitude:	-120.658840
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	395427
Reg Measure Type:	Unregulated
Region:	3
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	03/21/2014
Effective Date:	09/16/2013
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	395429
Region:	3
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	03/20/2014
Adoption/Issuance Date:	03/20/2014
Achieve Date:	Not reported
Termination Date:	04/04/2014
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV & 13267 03/20/2014 for Cal Poly SLO Utilidor Hot Water System Spills

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Description:	Also 13267 Order for technical report. See linked violations for spill reports and related docs.
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	4/4/2014
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HAZNET:

envid:	S112950388
Year:	2005
GEPAID:	CAC002598725
Contact:	DOUG OVERMAN
Telephone:	8057565178
Mailing Name:	Not reported
Mailing Address:	1 GRAND AVE
Mailing City,St,Zip:	SAN LUIS OBISPO, CA 934109001
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Tank bottom waste
Disposal Method:	Recycler
Tons:	0.41
Cat Decode:	Tank bottom waste
Method Decode:	Recycler
Facility County:	San Luis Obispo

NPDES:

Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	3
Regulatory Measure Id:	462762
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	3 40C374064
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/21/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cal Poly State University SLO
Discharge Address:	1 Grande Ave
Discharge City:	San Luis Obispo
Discharge State:	California
Discharge Zip:	93407
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	0
Region:	3

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

Regulatory Measure Id:	438395
Order No:	Not reported
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	3 40M2000067
Program Type:	Phase II Small MS4
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/22/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	california polytechnic state university san luis obispo
Discharge Address:	1 grand avenue
Discharge City:	san luis obispo
Discharge State:	California
Discharge Zip:	93407
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported

CAL POLY GRAND AVE HOUSING SOUTH (Continued) **S112950388**

CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

A3 **CHMIRS** **S114001771**
Target Property **CAL POLY - BUILDING 40 - 1 GRAND AVE.** **N/A**
SAN LUIS OBISPO, CA

Site 3 of 8 in cluster A

Actual: 394 ft.

CHMIRS:

OES Incident Number:	13-5793
OES notification:	09/16/2013
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drain, Unnamed Creek
Spill Site:	School
Cleanup By:	Responsible Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported

(Continued) **S114001771**

Measure:	Gal(s)
Other:	Not reported
Date/Time:	1000
Year:	2013
Agency:	Unknown
Incident Date:	9/16/2013
Admin Agency:	San Luis Obispo City Fire Department
Amount:	Not reported
Contained:	No
Site Type:	Storm Drain, Unnamed Creek
E Date:	Not reported
Substance:	Hot chemically treated water
Quantity Released:	10,000
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states: The Central Boiler Plant at Building 40 is releasing hot chemically water due to a mechanical failure. The leak is underground, but it is bubbling up from the ground, and releasing an unknown amount to a nearby storm drain. Electricity has been shut off to the building due to the volume of water being released.

A4 **KELLY L IVORS** **PEST LIC** **S117638132**
Target **1 GRAND AVE** **N/A**
Property **SAN LUIS OBISPO, CA 93407**

Site 4 of 8 in cluster A

Actual:
394 ft.

PEST LIC:

Facility Type:	PCA
Categories:	B
License No:	135771
Issued or Renewed Date:	01/01/2015
Expiration Date:	12/31/2016

A5
Target Property
Actual: 394 ft.

CALIFORNIA POLYTECHNIC STATE UNIVERSITY
1 GRAND AVENUE
SAN LUIS OBISPO, CA 93410

Site 5 of 8 in cluster A

FINDS **1016113559**
N/A

A6
Target Property
Actual: 394 ft.

BUILDING 186 CAL POLY UNIVERISTY, 1 GRAND AVE.
SAN LUIS OBISPO, CA 93407

Site 6 of 8 in cluster A

CHMIRS **S116778130**
N/A

CHMIRS:

OES Incident Number:	4-1577
OES notification:	03/15/2014
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Spenner Creek
Spill Site:	School
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	OTHER
Measure:	Gal(s)
Other:	Hot Water
Date/Time:	1
Year:	2014

(Continued) **S116778130**

Agency:	Cal Poly University
Incident Date:	3/15/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Spenner Creek
E Date:	Not reported
Substance:	Hot Water
Quantity Released:	50,000-80,000
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Broken Pipe
Fatals:	No
Comments:	Not reported
Description:	RP states that a mechanical failure to a piping system resulted in the release of 50,000-80,000 gal of hot water onto the ground and into storm drains which lead to Spenner Creek. Caller reports that the water is not chlorinated, and that a green dye has been used to trace the leak. Release is contained.

A7 **CHMIRS** **S116777293**
Target Property **RELEASE STARTED AT 1 GRAND AVE. AND ENDED AT OSOS ST. TRANSI** **N/A**
SAN LUIS OBISPO, CA

Site 7 of 8 in cluster A

Actual: 394 ft.

CHMIRS:

OES Incident Number:	4-0720
OES notification:	02/07/2014
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported

(Continued) **S116777293**

Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drains
Spill Site:	Road
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	PETROLEUM
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1000
Year:	2014
Agency:	Strata Environmental
Incident Date:	2/6/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Storm Drains
E Date:	Not reported
Substance:	Diesel
Quantity Released:	1
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Mechanical
Fatals:	No
Comments:	Not reported
Description:	RP states that a mechanical failure on a transit bus resulted in the release of approx. 1 gal of diesel onto the wet ground while traveling 4.6 miles before coming to a stop where a sheen was sighted. Release is contained and cleanup is complete at the stops and along the route traveled. Some of the release may have been

(Continued) **S116777293**

washed into storm drains due to rain.

A8 **CHMIRS** **S116777652**
Target Property **CAL POLY - BUILDING 40 - 1 GRAND AVE.** **N/A**
SAN LUIS OBISPO, CA 93407

Site 8 of 8 in cluster A

Actual: 394 ft.

CHMIRS:

OES Incident Number:	4-1086
OES notification:	02/23/2014
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drain, Stenner Creek
Spill Site:	School
Cleanup By:	No
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Type:	OTHER
Measure:	Gal(s)
Other:	Hot Chlorinated treated water
Date/Time:	1900
Year:	2014
Agency:	Cal Poly Env Health and Safety
Incident Date:	2/22/2014
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Yes
Site Type:	Storm Drain, Stenner Creek

(Continued) **S116777652**

E Date:	Not reported
Substance:	Hot chemically treated water
Quantity Released:	50,000
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	No
#2 Pipeline:	No
#3 Pipeline:	No
#1 Vessel >= 300 Tons:	No
#2 Vessel >= 300 Tons:	No
#3 Vessel >= 300 Tons:	No
Evacs:	No
Injuries:	Mechanical
Fatals:	No
Comments:	Not reported
Description:	The Central Boiler Plant at Building 40 is releasing hot chemically water due to a mechanical failure. The leak is underground, but it is bubbling up from the ground, and releasing an unknown amount to a nearby storm drain.

---

9 **CAL POLY UNIVERSITY FARM SHOP** **LUST** **S110655214**
South **HIGHLAND DRIVE/VIA CARTA** **N/A**
< 1/8 **SAN LUIS OBISPO, CA 93401**
0.068 mi.
360 ft.

Relative:
Lower

Actual:
315 ft.

LUST:

Region:	STATE
Global Id:	T0607999963
Latitude:	35.3043432196424
Longitude:	-120.662418007851
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/2014
Lead Agency:	CENTRAL COAST RWQCB (REGION 3)
Case Worker:	TAS
Local Agency:	Not reported
RB Case Number:	3264
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0607999963
Contact Type:	Regional Board Caseworker
Contact Name:	TOM SAYLES
Organization Name:	CENTRAL COAST RWQCB (REGION 3)
Address:	895 AEROVISTA PL, SUITE 101
City:	SAN LUIS OBISPO

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Email: tsayles@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0607999963
Contact Type: Local Agency Caseworker
Contact Name: KERRY BOYLE
Organization Name: SAN LUIS OBISPO FIRE DEPARTMENT
Address: 2160 SANTA BARBARA ST
City: SAN LUIS OBISPO
Email: kboyle@slocity.org
Phone Number: 8057817383

Status History:
Global Id: T0607999963
Status: Completed - Case Closed
Status Date: 01/23/2014

Global Id: T0607999963
Status: Open - Case Begin Date
Status Date: 09/01/1999

Global Id: T0607999963
Status: Open - Eligible for Closure
Status Date: 10/17/2012

Global Id: T0607999963
Status: Open - Remediation
Status Date: 05/17/2005

Global Id: T0607999963
Status: Open - Remediation
Status Date: 10/30/2009

Global Id: T0607999963
Status: Open - Site Assessment
Status Date: 10/26/1999

Global Id: T0607999963
Status: Open - Site Assessment
Status Date: 03/29/2000

Global Id: T0607999963
Status: Open - Site Assessment
Status Date: 08/01/2000

Global Id: T0607999963
Status: Open - Site Assessment
Status Date: 06/04/2007

Global Id: T0607999963
Status: Open - Site Assessment
Status Date: 07/31/2007

Global Id: T0607999963
Status: Open - Verification Monitoring
Status Date: 08/14/2003

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Global Id: T0607999963
Status: Open - Verification Monitoring
Status Date: 01/30/2011

Regulatory Activities:
Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 09/24/2007
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 10/30/2009
Action: 13267 Requirement

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607999963
Action Type: Other
Date: 09/01/1999
Action: Leak Reported

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2005
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 12/21/2012
Action: Request for Closure - Regulator Responded

Global Id: T0607999963
Action Type: RESPONSE
Date: 08/20/2013
Action: Other Report / Document - Regulator Responded

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2006
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2006
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 11/21/2006
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Date: 12/23/2013
Action: Well Destruction Report - Regulator Responded

Global Id: T0607999963
Action Type: RESPONSE
Date: 12/01/2001
Action: Well Installation Workplan - Regulator Responded

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2007
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2007
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2007
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2008
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2008
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 03/18/2008
Action: Well Installation Report

Global Id: T0607999963
Action Type: RESPONSE
Date: 12/22/2006
Action: Soil and Water Investigation Report

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 07/17/2000
Action: 13267 Requirement

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2003
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2008
Action: Monitoring Report - Quarterly

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Global Id:	T0607999963
Action Type:	RESPONSE
Date:	04/20/2008
Action:	Monitoring Report - Quarterly
Global Id:	T0607999963
Action Type:	REMEDIATION
Date:	09/14/2006
Action:	In Situ Physical/Chemical Treatment (other than SVE)
Global Id:	T0607999963
Action Type:	REMEDIATION
Date:	11/09/2009
Action:	In Situ Physical/Chemical Treatment (other than SVE)
Global Id:	T0607999963
Action Type:	RESPONSE
Date:	08/31/2007
Action:	Other Workplan
Global Id:	T0607999963
Action Type:	RESPONSE
Date:	08/31/2007
Action:	Soil and Water Investigation Workplan
Global Id:	T0607999963
Action Type:	ENFORCEMENT
Date:	09/21/2001
Action:	Staff Letter
Global Id:	T0607999963
Action Type:	ENFORCEMENT
Date:	09/26/2006
Action:	Site Visit / Inspection / Sampling
Global Id:	T0607999963
Action Type:	ENFORCEMENT
Date:	10/17/2012
Action:	13267 Requirement
Global Id:	T0607999963
Action Type:	ENFORCEMENT
Date:	08/28/2013
Action:	13267 Requirement
Global Id:	T0607999963
Action Type:	RESPONSE
Date:	04/20/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607999963
Action Type:	RESPONSE
Date:	10/20/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0607999963
Action Type:	RESPONSE

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Date: 04/20/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 01/23/2014
Action: Closure/No Further Action Letter

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 06/04/2002
Action: Staff Letter

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 08/30/2005
Action: Staff Letter

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2006
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 12/22/2006
Action: Interim Remedial Action Report

Global Id: T0607999963
Action Type: RESPONSE
Date: 02/15/2010
Action: CAP/RAP - Other Report

Global Id: T0607999963
Action Type: RESPONSE
Date: 02/15/2009
Action: Well Installation Workplan

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2009
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2009
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2009
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 08/15/2009
Action: Well Installation Report

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 06/08/2007
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 05/17/2005
Action: Staff Letter

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 04/18/2000
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 03/15/2002
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 09/08/2000
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 05/28/2003
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: 13267 Monitoring Program

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2009
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2010
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2010
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607999963
Action Type: RESPONSE

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Date: 10/16/2009
Action: Corrective Action Plan / Remedial Action Plan - Addendum

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 04/10/2009
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 01/25/2000
Action: 13267 Requirement

Global Id: T0607999963
Action Type: ENFORCEMENT
Date: 06/20/2013
Action: Notification - Fee Title Owners Notice

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2003
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2002
Action: Soil and Water Investigation Report

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2002
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2003
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2004
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/20/2005
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2004
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 01/20/2005
Action: Monitoring Report - Quarterly

CAL POLY UNIVERSITY FARM SHOP (Continued) **S110655214**

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2007
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 10/20/2004
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 04/28/2004
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/20/2005
Action: Monitoring Report - Quarterly

Global Id: T0607999963
Action Type: RESPONSE
Date: 07/29/2005
Action: Interim Remedial Action Plan

10
SE
< 1/8
0.092 mi.
487 ft.

CA POLY STATE
GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401

UST **1000252338**
ICIS **N/A**
US AIRS

Relative:
Lower

Actual:
341 ft.

UST:
Facility ID: FA0002572
Permitting Agency: SAN LUIS OBISPO COUNTY
Latitude: 35.30092
Longitude: -120.6608

ICIS:
Enforcement Action ID: CASLOA200124452
FRS ID: 110006826505
Action Name: MSO for NOV# 2951
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Administrative Order
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310

CA POLY STATE (Continued) **1000252338**

Tribal Land Code: Not reported

Enforcement Action ID: CASLOA200124450
FRS ID: 110006826505
Action Name: NOV #2951
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Notice of Violation
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300197
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300197
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Administrative Order
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300176
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300176
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Civil Judicial Action
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308

CA POLY STATE (Continued) **1000252338**

Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300174
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300174
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Civil Judicial Action
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300172
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300172
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Civil Judicial Action
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300163
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300163
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Notice of Violation
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 8221

CA POLY STATE (Continued) **1000252338**

Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300157
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300157
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Notice of Violation
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300155
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300155
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Notice of Violation
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300089
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300089
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Civil Judicial Action
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR

CA POLY STATE (Continued) **1000252338**

Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300088
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300088
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Administrative Order
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

Enforcement Action ID: CASLOA0000060790051300086
FRS ID: 110006826505
Action Name: CA POLY STATE 060790051300086
Facility Name: CA POLY STATE
Facility Address: GRAND AVE-RISK MGMT OFFICE
SAN LUIS OBISPO, CA 93401
Enforcement Action Type: Notice of Violation
Facility County: SAN LUIS OBISPO
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 8221
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 35.29601
Longitude in Decimal Degrees: -120.65308
Permit Type Desc: Not reported
Program System Acronym: CASLO0000607900513
Facility NAICS Code: 611310
Tribal Land Code: Not reported

US AIRS (AFS):
Envid: 1000252338
Region Code: 09
County Code: CA079
Programmatic ID: AIR CASLO0000607900513

CA POLY STATE (Continued) **1000252338**

Facility Registry ID: 110006826505
D and B Number: Not reported
Facility Site Name: CA POLY STATE
Primary SIC Code: 8221
NAICS Code: 611310
Default Air Classification Code: SMI
Facility Type of Ownership Code: POF
Air CMS Category Code: SMI
HPV Status: Not reported

US AIRS (AFS):
Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:20:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:29:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1992-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1993-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1995-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1996-01-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1996-11-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1997-12-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1997-12-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1998-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1998-02-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1998-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1998-03-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 1998-03-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1998-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 1999-11-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2000-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2001-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2002-04-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2002-04-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2002-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2002-10-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-01-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-05-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-06-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2003-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2004-10-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-01-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-02-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-03-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-05-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-06-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2005-11-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-02-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-03-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-03-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-05-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-11-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2006-12-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-01-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2007-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-03-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2007-11-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-02-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-09-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2008-11-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-01-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-02-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2009-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-03-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-04-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-05-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-09-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-09-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-11-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards
Activity Date: 2009-11-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards (Non-Major)
Activity Date: 2015-06-11 00:00:00
Activity Status Date: 2015-12-15 15:43:30
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards (Non-Major)
Activity Date: 2015-06-18 00:00:00
Activity Status Date: 2015-12-15 15:52:06
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards (Non-Major)
Activity Date: 2015-06-30 00:00:00
Activity Status Date: 2015-12-15 15:53:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: New Source Performance Standards (Non-Major)
Activity Date: 2015-03-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2015-06-11 00:00:00
Activity Status Date: 2015-12-15 15:43:30
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2015-06-18 00:00:00
Activity Status Date: 2015-12-15 15:52:06
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2015-06-30 00:00:00
Activity Status Date: 2015-12-15 15:53:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:20:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality

CA POLY STATE (Continued) **1000252338**

Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:29:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1992-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1993-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1994-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1995-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1996-01-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1996-11-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1997-12-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1997-12-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-02-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-03-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-03-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1998-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 1999-11-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2000-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2001-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality

CA POLY STATE (Continued) **1000252338**

Activity Date: 2002-04-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2002-04-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2002-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2002-10-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-01-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-05-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-06-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2003-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2004-10-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-01-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-02-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-03-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-05-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality

CA POLY STATE (Continued) **1000252338**

Activity Date: 2005-06-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2005-11-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-02-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-03-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-03-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-05-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-11-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2006-12-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-01-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-03-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality

CA POLY STATE (Continued) **1000252338**

Activity Date: 2007-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2007-11-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-02-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2008-09-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2009-02-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2009-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2009-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Prevention of Significant Deterioration of Air Quality
Activity Date: 2015-03-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: Not reported
Activity Status Date: 2014-10-19 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Case File Data Entered

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-12-27 00:00:00
Activity Status Date: 2011-02-22 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-02-28 00:00:00
Activity Status Date: 2011-02-22 00:00:00
Activity Group: Case File

CA POLY STATE (Continued) **1000252338**

Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-04-22 00:00:00
Activity Status Date: 2011-10-11 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: Not reported
Activity Status Date: 2007-06-25 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-06-11 00:00:00
Activity Status Date: 2015-12-15 15:43:30
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-06-18 00:00:00
Activity Status Date: 2015-12-15 15:52:06
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2015-06-30 00:00:00
Activity Status Date: 2015-12-15 15:53:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:20:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-09-02 00:00:00
Activity Status Date: 2016-05-24 12:29:48
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-10-21 00:00:00
Activity Status Date: 2016-05-26 17:36:05
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-10-27 00:00:00
Activity Status Date: 2016-05-26 17:44:21
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-12-10 00:00:00
Activity Status Date: 2016-05-26 17:37:34
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2016-01-26 00:00:00
Activity Status Date: 2016-05-26 17:46:23
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1992-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-01-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-11-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-12-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-12-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-02-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-03-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 1998-03-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-11-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-04-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-04-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-10-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-01-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-05-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-06-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-10-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2003-10-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-01-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-01-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-01-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-01-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-03-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-05-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-07-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-10-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-01-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-02-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-03-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-05-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-06-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2005-11-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-01-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-02-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-03-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-03-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-05-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-11-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-12-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-03-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-05-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-11-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2008-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-02-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-02-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-09-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-11-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-01-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-02-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-03-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-04-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-05-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-09-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-09-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2009-11-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-11-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-12-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-01-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-01-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-01-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-02-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-02-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-02-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-03-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-05-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-08-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-09-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-12-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2011-01-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-01-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-02-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-04-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-05-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-08-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-11-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-12-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-01-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-03-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-04-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-07-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-09-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-09-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2012-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-11-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-01-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-01-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-03-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-06-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-09-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-12-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-01-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-03-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-03-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

CA POLY STATE (Continued) **1000252338**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-03-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-04-17 00:00:00
Activity Status Date: 2007-04-17 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-05-19 00:00:00
Activity Status Date: 2011-05-19 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-01-24 00:00:00
Activity Status Date: 2007-01-24 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

CA POLY STATE (Continued) **1000252338**

Activity Date: 2010-11-23 00:00:00
Activity Status Date: 2010-11-23 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-01-19 00:00:00
Activity Status Date: 2011-01-19 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-04-01 00:00:00
Activity Status Date: 2011-04-01 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-04-30 00:00:00
Activity Status Date: 2007-04-30 00:00:00
Activity Group: Enforcement Action
Activity Type: Judicial
Activity Status: Closed

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-02-02 00:00:00
Activity Status Date: 2011-02-02 00:00:00
Activity Group: Enforcement Action
Activity Type: Judicial
Activity Status: Closed

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505

CA POLY STATE (Continued) **1000252338**

Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-02-16 00:00:00
Activity Status Date: 2011-02-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Judicial
Activity Status: Closed

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-05-25 00:00:00
Activity Status Date: 2011-05-25 00:00:00
Activity Group: Enforcement Action
Activity Type: Judicial
Activity Status: Closed

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-02-25 00:00:00
Activity Status Date: 2015-06-25 11:00:39
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2014-10-31 00:00:00
Activity Status Date: 2015-07-06 13:07:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-01-07 00:00:00
Activity Status Date: 2015-06-29 16:09:57
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

CA POLY STATE (Continued) **1000252338**

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-02-27 00:00:00
Activity Status Date: 2015-07-06 13:09:19
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-03-27 00:00:00
Activity Status Date: 2015-07-06 12:58:58
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-02-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: 2015-03-27 00:00:00
Activity Status Date: 2015-03-27 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASLO0000607900513
Facility Registry ID: 110006826505
Air Operating Status Code: OPR
Default Air Classification Code: SMI
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2015-02-25 00:00:00
Activity Group: Enforcement Action

CA POLY STATE (Continued) **1000252338**

Activity Type: Administrative - Informal
Activity Status: Achieved

B11
SSW
1/2-1
0.561 mi.
2960 ft.

BREEZE GAS & MINI MART
796 FOOTHILL BOULEVARD
SAN LUIS OBISPO, CA 91372

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
251 ft.

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Notify 65 **S100178980**
N/A

B12
SSW
1/2-1
0.561 mi.
2960 ft.

BREEZE GAS & MINI MART
796 FOOTHILL BOULEVARD
SAN LUIS OBISPO, CA 91372

Site 2 of 2 in cluster B

Relative:
Lower

Actual:
251 ft.

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Notify 65 **S100178979**
N/A

13
South
1/2-1
0.864 mi.
4562 ft.

510 A HATHAWAY
SAN LUIS OBISPO, CA 91372

Relative:
Lower

Actual:
248 ft.

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Notify 65 **S100177967**
N/A

C14
SSE
1/2-1
0.968 mi.
5110 ft.

GRAND AND LOOMIS AVE.
SAN LUIS OBISPO, CA 91372

Site 1 of 2 in cluster C

Relative:
Lower

Actual:
335 ft.

Notify 65 **S100179512**
N/A

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

C15
SSE
1/2-1
0.968 mi.
5110 ft.

GRAND AND LOOMIS AVE.
SAN LUIS OBISPO, CA 91372

Site 2 of 2 in cluster C

Relative:
Lower

Actual:
335 ft.

Notify 65 **S100179513**
N/A

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN LUIS OBISPO	S114589337	CAL POLY UNIVERSITY FARM SHOP	HIGHLAND DRIVE/VIA CARTA		RGA LUST
SAN LUIS OBISPO	S114589340	CAL POLY UNIVERSITY FARM SHOP	HIGHLAND DRIVE/VIA CARTA		RGA LUST
SAN LUIS OBISPO	S114589336	CAL POLY UNIVERSITY FARM SH	HIGHLAND DRIVE/VI		RGA LUST
SAN LUIS OBISPO	S105736182	CAL POLY UNIVERSITY FARM SHOP	HIGHLAND DRIVE/VIA CARTA	93401	LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016
Date Data Arrived at EDR: 10/04/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/04/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/20/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/20/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/18/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/02/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/02/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/15/2016
Date Data Arrived at EDR: 08/16/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 50

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/15/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/13/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/13/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/11/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/02/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/20/2016
Date Data Arrived at EDR: 09/21/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 51

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/21/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 08/25/2016
Date Data Arrived at EDR: 08/26/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 49

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/04/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/02/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 64

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/29/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2016
Date Data Arrived at EDR: 09/27/2016
Date Made Active in Reports: 10/20/2016
Number of Days to Update: 23

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/25/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 37

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/28/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 87

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/27/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/03/2016
Date Data Arrived at EDR: 07/26/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 59

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/26/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/13/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 31

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/13/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/01/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/08/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016
Date Data Arrived at EDR: 08/17/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 65

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/08/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 81
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 11/18/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016
Date Data Arrived at EDR: 08/05/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/11/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 11/17/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 11/17/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/03/2016
Date Data Arrived at EDR: 10/05/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 16
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/23/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016
Date Data Arrived at EDR: 07/26/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 59

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/08/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/20/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/01/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/12/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 65

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 12/05/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 52

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/27/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 08/24/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 42

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 11/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/10/2016
Date Data Arrived at EDR: 08/15/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 51

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/12/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 08/23/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 43

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/11/2016
Date Data Arrived at EDR: 07/13/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 36

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/12/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 37

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/15/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 37

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 08/23/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 59

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

ICE: ICE
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 08/23/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 43

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/22/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016
Date Data Arrived at EDR: 09/20/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/20/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

ABANDONED MINES: Abandoned Mines
An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 81

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/14/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 35

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/07/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/07/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 10/21/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 23

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 08/24/2016
Date Made Active in Reports: 10/10/2016
Number of Days to Update: 47

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 11/01/2016
Date Data Arrived at EDR: 11/03/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 19

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/11/2016
Date Data Arrived at EDR: 10/14/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 35

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 10/25/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 10/24/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 22

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 08/04/2016
Date Data Arrived at EDR: 08/08/2016
Date Made Active in Reports: 10/18/2016
Number of Days to Update: 71

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 26

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 09/08/2016
Date Data Arrived at EDR: 09/09/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 35

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/17/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/05/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/15/2016
Date Data Arrived at EDR: 07/19/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/18/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/17/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/17/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/17/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/23/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 28

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/07/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/18/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 32

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 04/07/2016
Date Data Arrived at EDR: 04/26/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 36

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/17/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 32

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 08/29/2016
Date Data Arrived at EDR: 08/31/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 44

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 07/25/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/15/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 51

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/03/2016
Date Data Arrived at EDR: 08/15/2016
Date Made Active in Reports: 10/07/2016
Number of Days to Update: 53

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/09/2016
Date Made Active in Reports: 10/11/2016
Number of Days to Update: 63

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/08/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 07/18/2016
Date Made Active in Reports: 10/07/2016
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/13/2016
Date Data Arrived at EDR: 07/18/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 21

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/22/2016
Date Data Arrived at EDR: 10/04/2016
Date Made Active in Reports: 11/18/2016
Number of Days to Update: 45

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/04/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 43

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/04/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/07/2016
Date Made Active in Reports: 10/19/2016
Number of Days to Update: 42

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/06/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/21/2016
Date Data Arrived at EDR: 09/22/2016
Date Made Active in Reports: 10/18/2016
Number of Days to Update: 26
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/18/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 10/04/2016
Number of Days to Update: 43
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 15
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 08/17/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 10/04/2016
Number of Days to Update: 43
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/28/2016
Next Scheduled EDR Contact: 03/13/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/03/2016
Date Data Arrived at EDR: 08/08/2016
Date Made Active in Reports: 10/07/2016
Number of Days to Update: 60

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/07/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 08/17/2016
Date Data Arrived at EDR: 08/22/2016
Date Made Active in Reports: 10/04/2016
Number of Days to Update: 43

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/16/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/15/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 29

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 10/18/2016
Number of Days to Update: 19

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/09/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 09/27/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 55

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 44

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 12/02/2016
Number of Days to Update: 87

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/02/2016
Next Scheduled EDR Contact: 03/20/2017
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 08/12/2016
Date Data Arrived at EDR: 08/16/2016
Date Made Active in Reports: 10/04/2016
Number of Days to Update: 49

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/28/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/14/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/28/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 10/07/2016
Number of Days to Update: 67

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/29/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/11/2016
Number of Days to Update: 27

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 08/24/2016
Date Made Active in Reports: 10/11/2016
Number of Days to Update: 48

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 11/14/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/03/2016
Date Data Arrived at EDR: 08/05/2016
Date Made Active in Reports: 10/05/2016
Number of Days to Update: 61

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/11/2016
Next Scheduled EDR Contact: 02/27/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 08/31/2016
Date Made Active in Reports: 12/12/2016
Number of Days to Update: 103

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/12/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/21/2016
Next Scheduled EDR Contact: 03/06/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/12/2016
Next Scheduled EDR Contact: 03/27/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CAL POLY OPPENHEIMER
1 GRAND AVENUE
SAN LUIS OBISPO, CA 93405

TARGET PROPERTY COORDINATES

Latitude (North):	35.308916 - 35° 18' 32.10''
Longitude (West):	120.662248 - 120° 39' 44.09''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	712543.6
UTM Y (Meters):	3909610.0
Elevation:	394 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5629228 SAN LUIS OBISPO, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

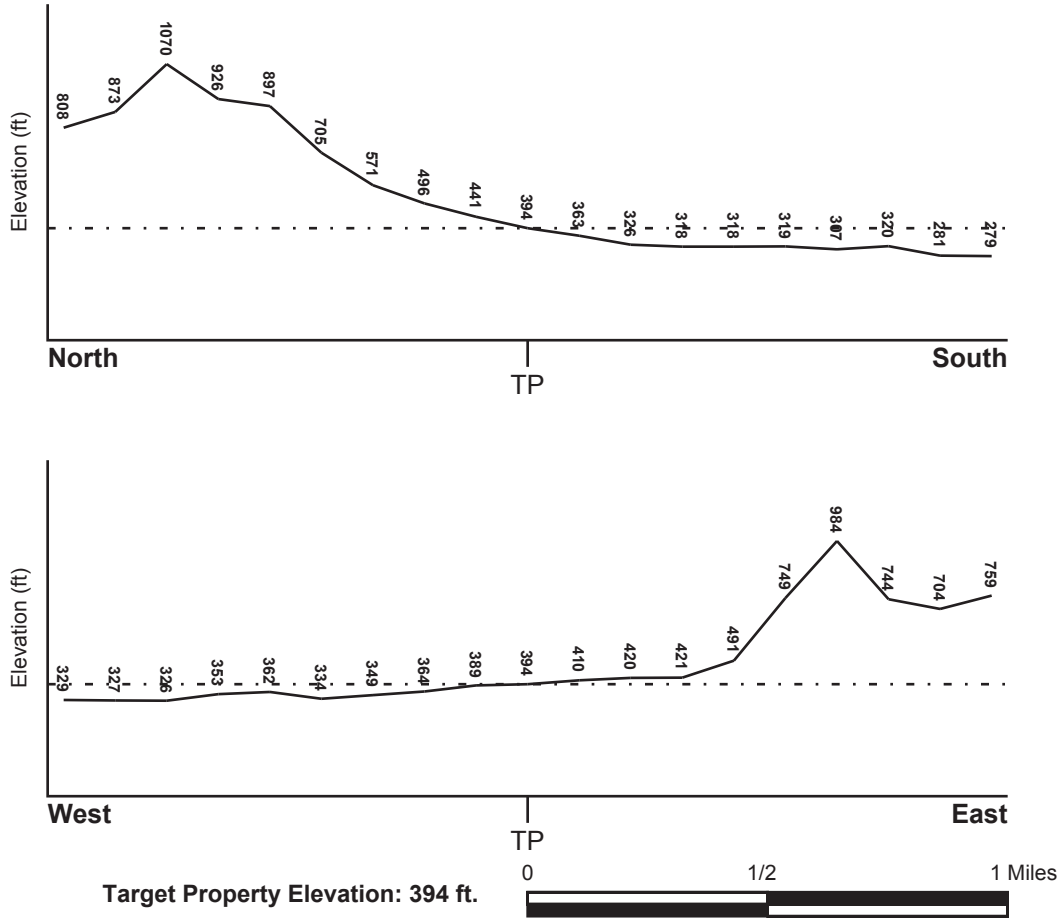
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06079C1066G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06079C1060G	FEMA FIRM Flood data
06079C1067G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SAN LUIS OBISPO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

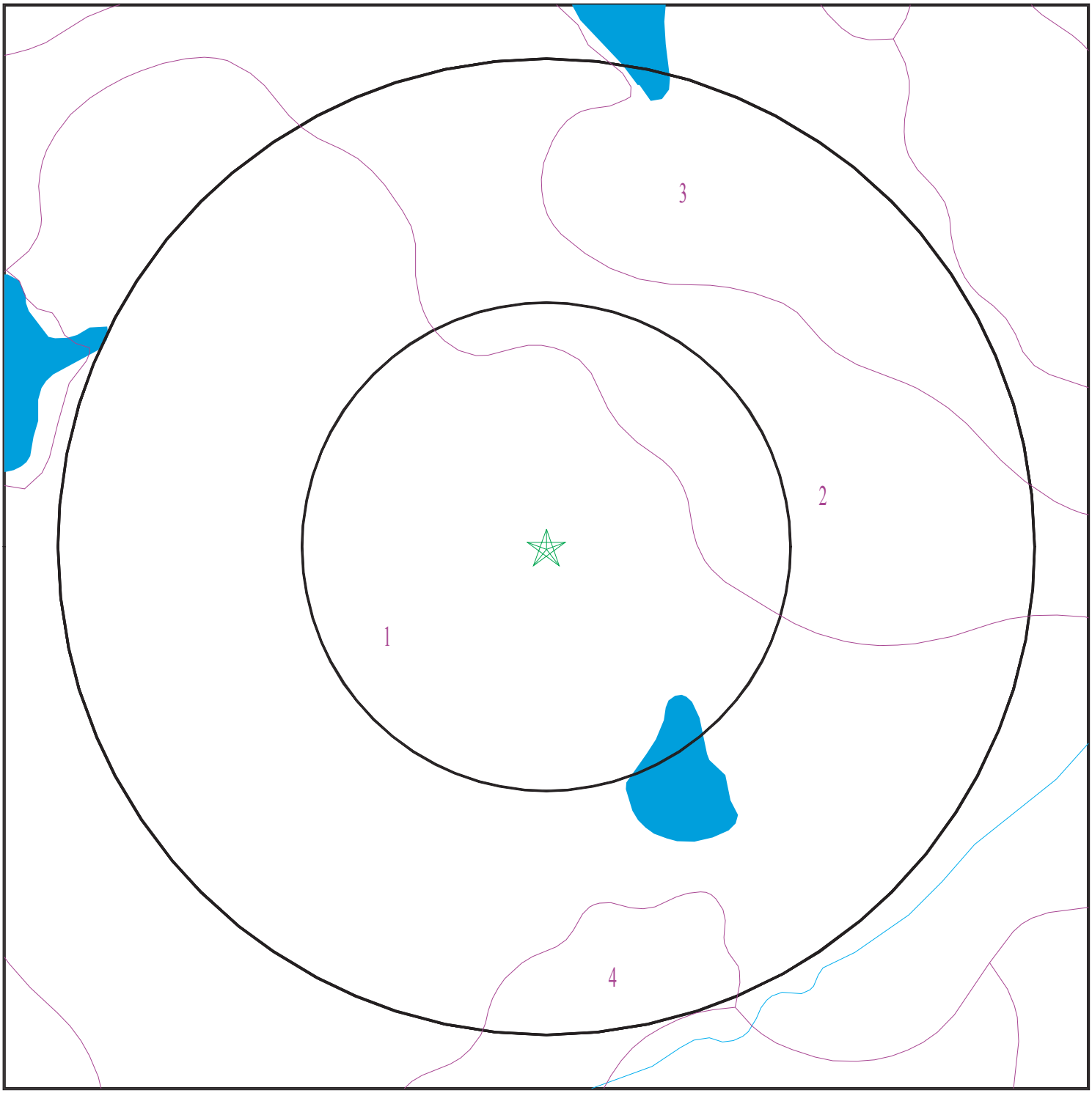
Era:	Paleozoic
System:	Permian
Series:	Ultramafic rocks
Code:	uM *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4805634.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Cal Poly Oppenheimer	CLIENT:	Haro Environmental, Inc.
ADDRESS:	1 Grand Avenue San Luis Obispo CA 93405	CONTACT:	Elliot Haro
LAT/LONG:	35.308916 / 120.662248	INQUIRY #:	4805634.2s
		DATE:	December 14, 2016 8:31 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Los Osos

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	14 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
3	31 inches	38 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
4	38 inches	42 inches	weathered bedrock	Not reported	Not reported	Max: 0 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Los Osos

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	14 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
3	31 inches	38 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
4	38 inches	42 inches	weathered bedrock	Not reported	Not reported	Max: 0 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name: Los Osos

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	14 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 6.5 Min: 5.6
3	31 inches	38 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
4	38 inches	42 inches	weathered bedrock	Not reported	Not reported	Max: 0 Min: 0	Max: Min:

Soil Map ID: 4

Soil Component Name: Salinas

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	29 inches	72 inches	stratified loam to silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

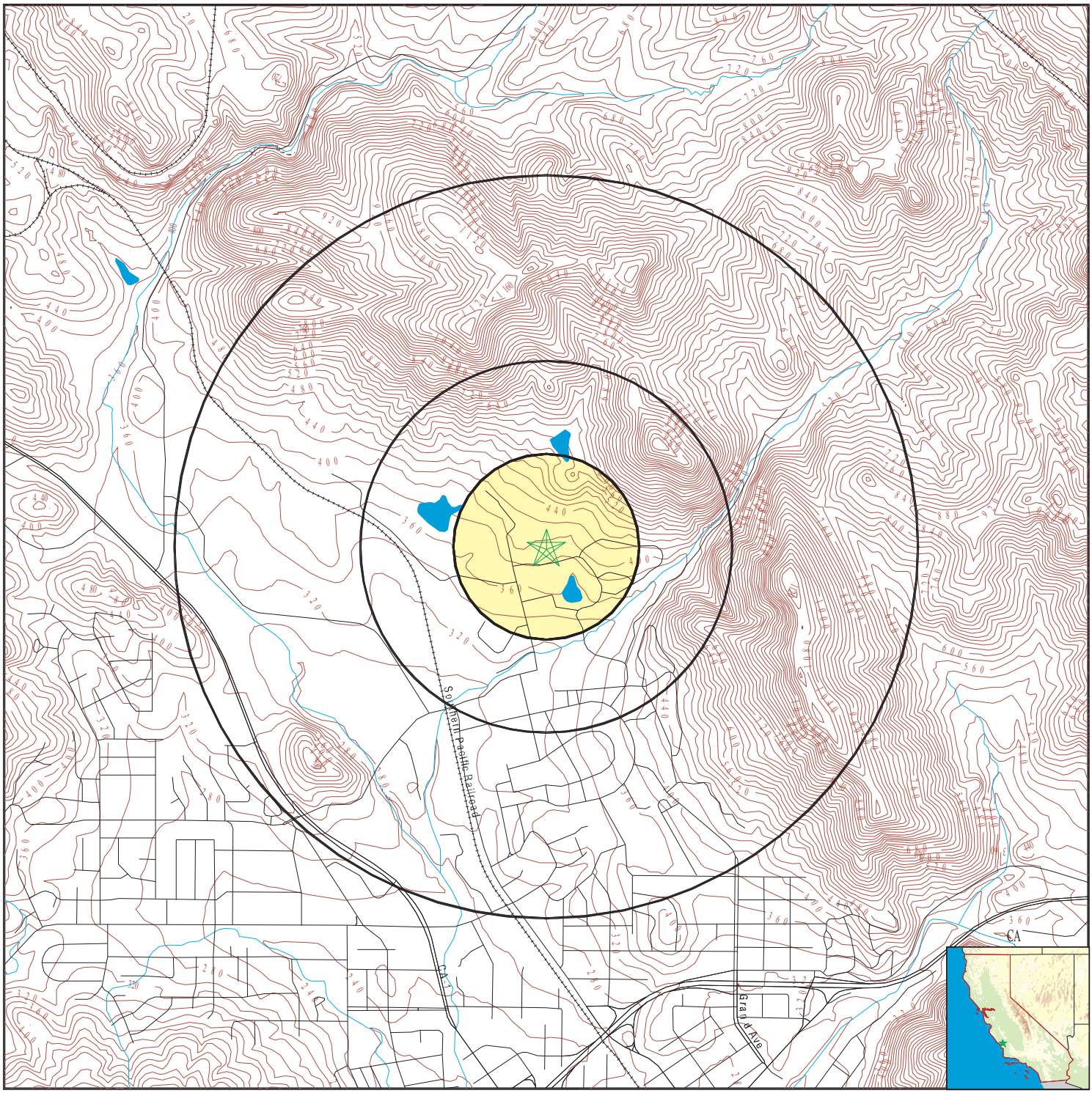
Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4805634.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Cal Poly Oppenheimer	CLIENT:	Haro Environmental, Inc.
ADDRESS:	1 Grand Avenue San Luis Obispo CA 93405	CONTACT:	Elliot Haro
		INQUIRY #:	4805634.2s
LAT/LONG:	35.308916 / 120.662248	DATE:	December 14, 2016 8:31 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93405	103	3

Federal EPA Radon Zone for SAN LUIS OBISPO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN LUIS OBISPO COUNTY, CA

Number of sites tested: 15

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.673 pCi/L	87%	7%	7%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Cal Poly Oppenheimer
1 Grand Avenue
San Luis Obispo, CA 93405

Inquiry Number: 4805634.5
December 17, 2016

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2013	☑	☐	Cole Information Services
2008	☑	☐	Cole Information Services
2003	☑	☐	Cole Information Services
1999	☑	☐	Cole Information Services
1995	☑	☐	Cole Information Services
1992	☑	☐	Cole Information Services
1977	☑	☐	Polk's City Directory
1972	☑	☐	Polk's City Directory
1967	☑	☐	Polk's City Directory
1962	☑	☐	Polk's City Directory

RECORD SOURCES

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FINDINGS

TARGET PROPERTY STREET

1 Grand Avenue
San Luis Obispo, CA 93405

Year	*CD Image*	*Source*
GRAND AVE		
2013	pg A1	Cole Information Services
2008	pg A2	Cole Information Services
2003	pg A3	Cole Information Services
1999	pg A4	Cole Information Services
1995	pg A5	Cole Information Services
1992	pg A6	Cole Information Services
1977	pg A7	Polk's City Directory
1972	pg A8	Polk's City Directory
1967	pg A10	Polk's City Directory
1967	pg A9	Polk's City Directory
1962	pg A11	Polk's City Directory
1962	pg A12	Polk's City Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 2013

1	CALIFORNIA POLYTECHNIC STATE UNIVERS
	CALIFORNIA POLYTECHNIC STATE UNIVERS
	CHASE BANK
	SESLOC FEDERAL CREDIT UNION
	STARBUCKS COFFEE
	SUNDT
100	VICKIE CONTE
110	M REED
120	RAMOS JUSTINE
130	OCCUPANT UNKNOWN
140	BRYAN KOCH
165	BLUE SKY PRESCHOOL
	FAMILY PARTNERSHIP CHARTER SCHOOL
	OLIVE GROVE CHARTER SCHOOL K12
	SLO CLASSICAL ACADEMY
	UNIVERSITY OF SAN LUIS OBISPO SCHOOL
166	STEVEN SALES
210	ROGER ZANETTI

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 2008

1	ADVANCE RECORDS SYSTEM INC
	ASI CHILDRENS CENTER
	ASSOCIATED STUDENTS INC
	CAL POLY CORP
	CAL POLY CREAMERY
	CALIFORNIA STATE UNIVERSITY
	CHRISTOPHER COHAN CENTER
	EARTH & SOIL SCIENCE DEPT
	JAY SINGH
	POLY
	THE IRRIGATION TRAINING & RESEARC
	THE MUSTANG DAILY
	UNIVERSITY GRAPHIC SYSTEMS
100	VICKIE CONTE
107	DANIELLE YEE
110	D SZENTESI
125	CALIFORNIA PACIFIC LANGUAGE SCHOOL
	I FIX IT
140	BRYAN KOCH
165	CALIFORNIA COAST LANGUAGE ACADEMY
	CENTRAL COAST VILLAGE CENTER
	FAMILY PARTNERSHIP CHARTER SCHOOL
	OLIVE GROVE CHARTER SCHOOL K 12
210	STEVE ANGELO

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 2003

1	BROOKE BITTIKER
	DUSTIN ECCLES
	FRED WALKER
	JAMES YOUNG
	JESSE CHURCHILL
	KEVIN SITES
	MECHANICAL ENGINEERING DEPT
	RENE BREWER
	RICK BENNETT
	SCHOOL OF ARCHTCTR & ENVR DESI
	SCOTT JACOBS
	STUART TOMENY
	SUZANNE FARAG
	TIMOTHY STODDARD
100	JOSEPHINE AVILA
107	D YEE
110	JUSTIN PFAFFINGER
120	JEAN LIBERT
129	ANIMAL CARE CLINIC
130	JUDITH WRIGHT
140	OCCUPANT UNKNOWN
165	OCCUPANT UNKNOWN
	SAN LUIS CSTL UNFD SCHL DIST E
166	ZUNELLA KNECHT
210	MICHAEL BARNICK

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 1999

100	OCCUPANT UNKNOWN
	VICKIE CONTE
110	D SZENTESI
120	OCCUPANT UNKNOWN
130	OCCUPANT UNKNOWN
140	BRYAN KOCH
	JASON MAZZETTA
165	PACHECO SCHOOL
	SAN LUIS COASTAL UNIFIED SCHOOL DISTRICT

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 1995

100	OCCUPANT UNKNOWNN
110	KOSTLAN, STEVE
120	MCCLAIN, BRODIE
130	OCCUPANT UNKNOWNN
140	HOEKSTRA, KURT
165	HEAD START
	PACHECO ELEMENTARY SCHOOL
166	OCCUPANT UNKNOWNN
210	NILES, CYNTHIA

Target Street	Cross Street	Source
✓	-	Cole Information Services

GRAND AVE 1992

100	AVILA, FRANK W
120	DRAGT, HAROLD JR
130	GARADIS, MATTHEW
140	COLLIER, JAMES D
165	HEADSTART
	PACHECO DAY CARE
	SANLUIS SC PACHECO
166	KNECHT, ZUNELLA
210	WATERS, R

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1977

GRAND AV —FROM 1800
SLACK AV SOUTH

ZIP CODE 93401
110 No Return
120★Markwort Mark G 543-3441
130 Preuss Mark
140★Ewy Sioux 541-1161
165 Pacheco Elementary School
544-7241
166 Knecht Zunella F Mrs ◎
543-0534
HAYS ST INTERSECTS
210 Finn Andy
236★Kansteimer Don
236c★Ramme Julie 544-9206
236½★Sheredy Brian 544-6837
★Mc Guire Kevin

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1972

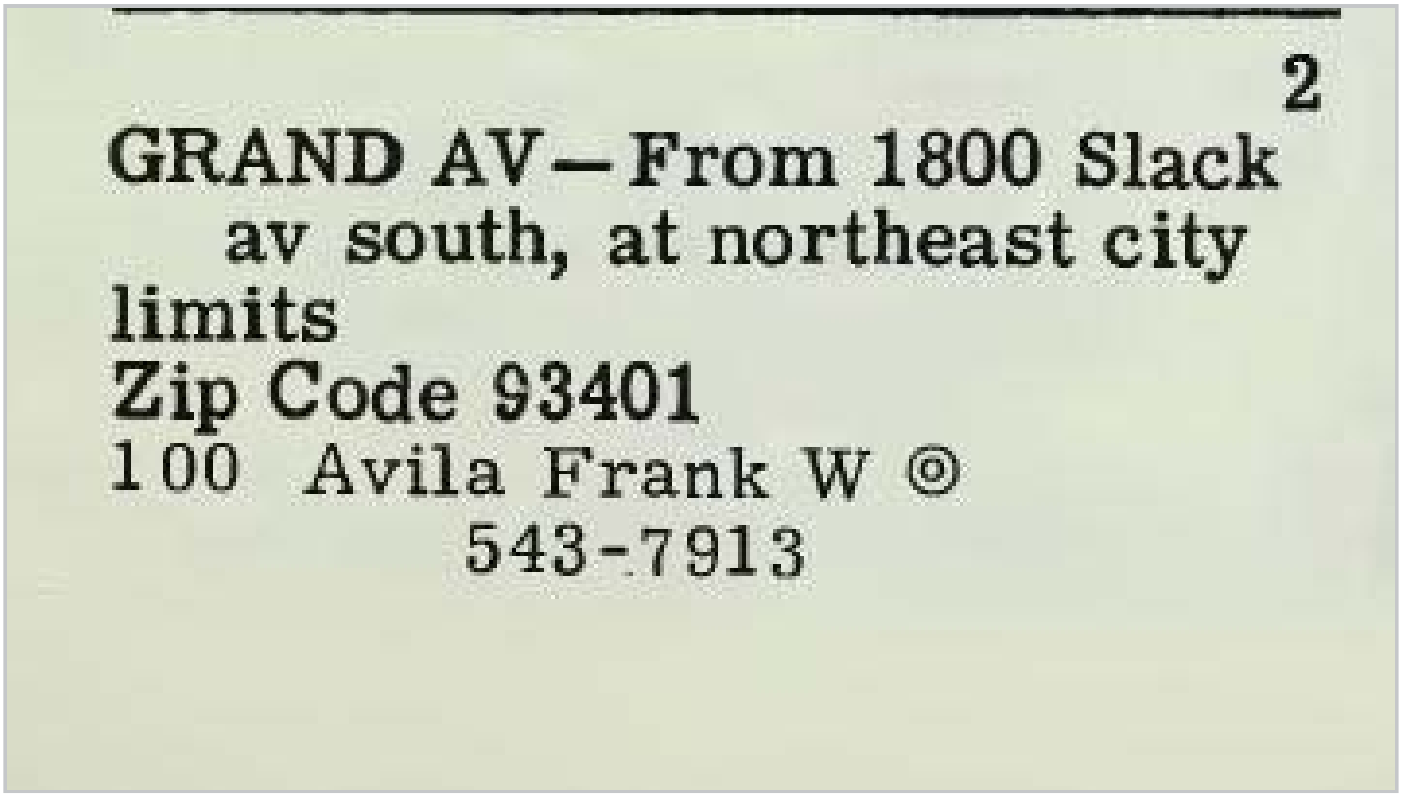
GRAND AV —FROM 1800
SLACK AV SOUTH

ZIP CODE 93401

100 Avila Frank W ◎ 543-7913
110 ★ Graham David
120 No Return
130 Preuss Bernhardt S ◎
544-1537
140 Varner James R 543-2780
165 Pacheco Elementary School
543-2010
166 Knecht Fred W ◎ 543-0534
HAYS ST INTERSECTS
210 ★ Nelson John
236 Cuddeback Keith 544-3042
236½ No Return
No Return
250 ★ Kindell Wm
251 Jespersen Chris School
543-6940
254 Tognetti Darlene 544-4305

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1967



2

GRAND AV—From 1800 Slack av south, at northeast city limits

Zip Code 93401

100 Avila Frank W ◎
543-7913

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1967

110 Miller Glenn 544-3435
120 Alley Douglas 543-4532
130 Preuss Virginia A Mrs ◎
543-8435
140 Hughes Oriel O Mrs ◎
543-3413
165 Pacheco Elem Sch
543-1941
166 Knecht Fred W ◎
543-0534
Hays begins
210 Friesen Pearl E Mrs ◎
543-2950
236 Gustafson Esther M Mrs
543-6796
236½ Emifoniye Philip O
544-3399

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1962

GRAND AV—From 1800 Slack av south, at northeast city limits

100 Avila Frank W ◎
LI3-7913
110 Waggoner Phillip L
LI3-4265
120 Vacant
130 Preuss Virginia A Mrs ◎
LI3-8435
140 Gehlen Alfred J
141 Pacheco Elem Sch
LI3-1941
166 Knecht Fred W ◎
LI3-0534

Target Street	Cross Street	Source
✓	-	Polk's City Directory

GRAND AVE 1962

Hays begins
210 Friesen Pearl Mrs ◎
LI3-2950
210½ Hancock Gary
236 Gustafson Esther M
Mrs LI3-6796
236½ Vacant
250 Schauerman Sam ◎
LI3-0744
251 Chris Jespersen School
LI3-6940
254 Passom Clarence L
LI3-0288

APPENDIX B

INTERVIEW AND RESEARCH DOCUMENTATION

HARO ENVIRONMENTAL

Environmental Site Assessment Questionnaire

Information provided in this Questionnaire will be used to develop a preliminary assessment of the environment condition of the proposed site and to develop an opinion regarding the potential for soil, groundwater, and/or surface water contamination associated with the former or current generation, use, storage, handling, or disposal of hazardous materials on or in the vicinity of the site. This Questionnaire is based on the guidelines of the American Society for Testing Materials (ASTM) Practice E 1528-00 (Standard Practice for Environment Site Assessments: Transaction Screen Process). The purpose of ASTM Practice 1528-00 and ASTM Practice E 1527-00 (Standard Practice for Environmental Site Assessments: Phase I Environmental: Phase I Environmental Site Assessment Process) is to define good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to range of contaminates within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products.

Property Address: 1 Grand Ave

City, State, Zip San Luis Obispo, CA 93407

Based on your knowledge of the site and adjacent properties, please check the best response to the questions below. Please answer the questions in good faith and to the extent of your knowledge. Please explain each "YES" response on the attached "Questionnaire Explanations" pages.

		Yes	No	Unknown
1a	Is the site used for an industrial use?	☐	☒	☐
1b	Are any adjacent properties used for an industrial use?	☐	☒	☐
2a	Do you have any knowledge that the site has been used for industrial function in the past?	☐	☒	☐
2b	Do you have any knowledge that any adjacent property has been used for an industrial function in the past?	☐	☒	☐
3a	Is the site used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo development laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? (If yes, indentify which)	☐	☒	☐

3b	Are any of the adjacent properties used as gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo development laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? (If yes, indentify which)	☐	☒	☐
4a	Do you have any knowledge that the site has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo development laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? (If yes, indentify which)	☐	☒	☐
4b	Do you have any knowledge that adjacent property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo development laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? (If yes, indentify which)	☐	☒	☐
5a	Are there currently any damaged or discarded automotive or industrial batteries, pesticide or paint containers, or other chemicals in individual containers or greater that 5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the site?	☒	☐	☐
5b	Do you have knowledge that there have been previously any damaged or discarded automotive or industrial batteries, pesticide or paint containers, or other chemicals in individual containers or greater that 5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the site?	☒	☐	☐
6a	Are there currently any industrial drums, typically 55 gal (208 L) or sacks of chemicals located on the site?	☒	☐	☐
6b	Do you have knowledge that previously there have been any industrial drums, typically 55 gal (208 L) or sacks of chemicals located on the site?	☒	☐	☐
7a	Has fill dirt been brought onto the site that originated from a contaminated property?	☐	☐	☒
7b	Do you have any knowledge that fill dirt has been brought onto the site that is from an unknown origin?	☐	☐	☒
8a	Are there currently any pits, ponds, or lagoons located on the site in connection with waste treatment or waste disposal?	☐	☒	☐
8b	Do you have any knowledge that there previously have been any pits, ponds, or lagoons located on the site in connection with waste treatment or waste disposal?	☒	☐	☐
9a	Is there currently any soil stained by hazardous materials or	☐	☐	☒

	petroleum products on the site?			
9b	Do you have any knowledge that there previously has been soil stained by hazardous materials or petroleum products on the site?	☐	☐	☒
10a	Are there currently any registered or unregistered storage tanks (above or underground) located on the site?	☒	☐	☐
10b	Do you have any knowledge that there previously have been any registered or unregistered storage tanks (above or underground) located on the site?	☐	☒	☐
11a	Are there currently any vent pipes, fill pipes, or access way indicting a fill pipe protruding from the ground on the site or adjacent to any structure located on the site?	☐	☐	☒
11b	Do you have any knowledge that there previously have been any vent pipes, fill pipes, or access way indicting a fill pipe protruding from the ground on the site or adjacent to any structure located on the site?	☐	☐	☒
12a	Are there currently any flooring, drains, or walls located on the site that are stained by substances other than water or are emitting foul odors?	☐	☐	☒
12b	Do you have any knowledge that there previously have been any flooring, drains, or walls located on the site that are stained by substances other than water or are emitting foul odors?	☐	☐	☒
13a	If the site is served by a private well or non-public water system, do you have any knowledge that contaminates have been identified in the well or system that exceed guidelines applicable to the water system?	☐	☐	☒
14	Do you have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the site or any facility located on the site?	☐	☐	☒
15a	Do you have any knowledge of any current use, manufacture, storage, or disposal of hazardous substance or petroleum products on the site?	☒	☐	☐
15b	Do you have any knowledge of any past use, manufacture, storage, or disposal of hazardous substance or petroleum products on the site?	☒	☐	☐
15c	Do you have any knowledge of the current existence of any environmental violations with respect to the site or any facility located on the site?	☐	☐	☒

15d	Do you have any knowledge of the past existence of any environmental violations with respect to the site or any facility located on the site?	☐	☐	☒
16	Do you have any knowledge of any environmental site assessment of the site that indicates the presence of hazardous substances or petroleum products on, or contamination of, the site or recommended further assessment of the site?	☐	☐	☒
17	Do you have any knowledge of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the site by any existing or former owner or occupant of the site or adjacent property?	☐	☐	☒
18a	Does the site discharge waste water (excluding sanitary waste or storm water) onto or adjacent to the site and/or into a storm water system?	☐	☒	☐
18b	Do you have any knowledge of any adjacent property that discharges waste water (excluding sanitary waste or storm water) onto or adjacent to the site and/or into the storm water system?	☐	☒	☐
19	Do you have any knowledge that any hazardous substance or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials have been dumped above grade, buried and/or burned on the site?	☐	☐	☒
20	Is Polychlorinated Biphenyls (PCB) in electrical transformers, capacitors, or other hydraulic equipment present on the site or are they any records of indicating past presents of equipment related to PCB?	☒	☐	☐
21a	Are any of the following documents regarding the site available for review: environmental site assessment reports; environmental audit reports; environmental permits; registration for above and/or underground storage tanks; material safety data sheets; community right-to-know plans regarding safety, preparedness and prevention, spill prevention, countermeasure, and/or disaster/emergency control; hydro geological reports; notices or correspondence from any governmental agency relating to past or current violations of environmental laws and/or environmental liens encumbering the site; hazardous waste generator notices or reports; geotechnical studies?	☐	☐	☒
21b	Do you have any knowledge that there have previously been any man-made structures (e.g., buildings, docks/platforms, railroad	☒	☐	☐

tracks, etc.) on the site? (If so, indicate the approximate construction date and use the structures(s))

Response to this questionnaire was prepared by:

Name(s): Thomas Featherstone

Title(s): Specialized Equipment Tech

Firm: Environmental Health & Safety, Cal Poly San Luis Obispo

Address: 1 Grand Ave, San Luis Obispo, CA 93407-0690

Phone#: 805-756-6661

Relationship to the site (e.g. Owner Site Manager, Agent, Tenant, etc): University EH&S Representative

Years Associated with the site: 6

The foregoing information, including comments and attachments (if any), is true and complete to the best of the undersigned's knowledge, information, and belief. Any limitations with respect to the completeness of the responses have been disclosed. The customer understands that the Bank will rely on the above information in evaluating the borrower's loan request. Knowingly making a false statement on this form is a violation of Federal law and could result in criminal prosecution, significant civil penalties and a denial of your loan. A false statement is punishable under 18 USC 1014 by imprisonment of not more than thirty years and/or a fine of not more than $1,000,000.

(Preparer Signature) 1/30/17 (Date)

FPCP PM

(Preparer Signature) 1/30/17 (Date)

(Preparer Signature) (Date)

Questionnaire Explanations

5a. Yes, pesticides in individual containers ranging from several ounces to 5 gallons exist in storage in Bldg 48M.

5b. Yes. See above.

6a. Yes, approx. 40-50 sacks of fertilizer of various quantities are stored in Bldg 48D.

6b. See above.

8b. An evaporation pit once occupied the area of the current pesticide rinsate tank. No known personnel remain in employment with Cal Poly that were witness to this.

10a. Yes, existing above ground pesticide rinsate tank behind Bldg 48M.

15a. Yes, hazardous materials in the form of pesticides and fertilizers answered in 5 & 6.

15b. Same as above.

20. Yes, PCB in electrical transformers. See attached documentation from EH&S.

21b. Yes, there are man made structures on the site. Academic Use structures of varying age. See CEQA document for list of all buildings.

State of California

California Polytechnic State University
San Luis Obispo, CA 93407

MEMORANDUM

To: Lincoln Castro
Compliance Advisor
Environmental Resources

Date: 03/31/94

File: 940331A.DOC

Copy:

From: David Ragsdale
Environmental Safety Officer
Public Safety Services

Subject: Inventory of PCB-Containing Equipment

In response to your request for updated information related to our PCB-containing equipment inventory, the following changes should be made to the inventory you provided us with Elizabeth Stowe's memo of March 21, 1994.

- Engineering West transformer, serial number E686493, has been removed and sent for disposal.
- Fremont Residence Hall transformer, serial number 69959, has been removed and sent for disposal.
- Main Gymnasium-inside transformer, serial number C862506, has been removed and sent for disposal.
- Main Substation transformer, serial number 181008, has been removed and sent for disposal.
- Muir Residence Hall transformer, serial number 69958, has been removed and sent for disposal.
- North Mountain Dormitories transformer, serial number 8635841, has been removed and sent for disposal.
- Ornamental Horticulture East transformer, serial number 2-53111, has been removed and sent for disposal.
- Santa Lucia Residence Hall transformer, serial number 69961, has been removed and sent for disposal.
- Science transformer, serial number C169491, has been removed and sent for disposal.
- Science North transformer, serial number YCR-83241, has been removed and sent for disposal.
- Sequoia Residence Hall transformer, serial number 69960, has been removed and sent for disposal.
- Tenaya Residence Hall transformer, serial number 69957, has been removed and sent for disposal.

California

Memorandum

Trustees of The California State University

To: Director, Plant Operations

Date: April 14, 1989

From: Ted Binkley
Chief, Plant Operation Services
Physical Planning and Development

Subject: Campus PCB Equipment Survey and Symposium on Air Pollution Regulations Enforcement

The enclosed documents are for your use and information:

1. PCB equipment survey of campuses, recently completed by the Office of the State Architect.
2. Procure for the 11th annual Symposium on Air Pollution Enforcement

The re-survey of campus PCB equipment identifies all remaining PCB transformers and switches on CSU campuses. This report is to be compared to campus records to confirm PCB equipment inventory and the PCB Compliance Program should be based on this comparison. In order to assist the campuses in the planning and scheduling for abatement of PCB equipment, OSA has committed to identifying the status of all PCB equipment scheduled for abatement under their program. The status should identify a window for abatement. The Chancellor anticipates receiving this report by the end of April, whereby distributing it to the campuses.

Due to the significant increase in Environmental Regulations governing air pollution, the Chancellor's Office encourages appropriate campus representatives to attend workshops, similar to those enclosed, in order to understand the impact of the regulations and how they will be enforced.

If there are any questions regarding the attached information, please address them to Ed Torres at 213/985-9460.

cc: Vice President, Administration
Executive Dean
Environmental Health and Safety Officer

Enclosures

ET:TB:jal
0127M

MAP	LOCATION	SERIAL	KVA	R	NMPLT FLUID	SAMP	PPM PCB	DISCONNECT	SAMP	PCB PPM
36	Machine Shop	6BAJ7494	75		NA	4847	0.0	fuse cutouts	NA	0
36	Machine Shop	6BAJ7495	75		NA	4848	0.0	fuse cutouts	NA	0
36	Machine Shop	6BAJ7500	75		NA	4849	0.0	fuse cutouts	NA	0
42	Main Gymnasium - Inside	CB62506	300		Pyranol	NA	>500	OFC	4466	2.0
120	Main Substation	181008	3750		Oil	NA	>500	Air Breaker	NA	0
120	Main Substation	L247739	3750		Oil	4450	0.0	Air Breaker	NA	0
120	Main Substation - Lighting	3CL12B1	0		Oil	4594	1.0	NA	NA	0
120	Main Substation - Lighting	9952905	0		Oil	4595	1.0	OFC	4593	0.0
40	Mechanical Engineering	12965-1	225		Air Cooled	NA	0	OFC	4493	0.0
40	Mechanical Engineering	12965-1	225		Air Cooled	NA	0	OFC	4493	0.0
40	Mechanical Engineering	6343-1 Removed 9/15/89	100		Oil	4492	0.0	OFC	4491	8.0
40	Mechanical Engineering	59D1898	NA		Oil	4490	2.0	OFC	4485	1.0
40	Mechanical Engineering	NA	NA		NA	4487	0.0	OFC	4484	0.0
40	Mechanical Engineering	9973601	NA		Oil	4489	2.0	OFC	4486	0.0
40	Mechanical Engineering	9988951	NA		Oil	4488	0.0	NA	NA	NA
107	Muir Residence Hall	69958	150		Askarel	NA	>500	OFC	4463	6.0
121	North Mountain Dormitories	8635840 Removed 9/15/89	75		Oil	4600	35.0	OFC	4517	13.0
121	North Mountain Dormitories	8635841 Removed 9/15/89	75		Oil	4515	70.0	OFC	4517	13.0
121	North Mountain Dormitories	8635848 Removed 9/15/89	75		Oil	4516	39.0	OFC	4517	13.0
32	NRM Greenhouse AKA ES-05	69555145 removed 6/19/89	50		Oil	4793	112.0	OFC	4796	0.0
32	NRM Greenhouse AKA ES-04	6955153 removed 6/19/89	50		Oil	4795	252.0	OFC	4796	0.0
32	NRM Greenhouse AKA ES-03	7221380 removed 6/19/89	50		Oil	4794	258.0	OFC	4796	0.0
76	Old Power Plant	4796-1	100		Oil	4592	1.0	Circuit Breaker	4585	1.0
76	Old Power Plant	16989	75		Oil	4586	0.0	Ceramic Breaker	NA	0
76	Old Power Plant	16987	75		Oil	4588	0.0	Ceramic Breaker	NA	0
76	Old Power Plant	16988	75		Oil	4587	0.0	Ceramic Breaker	NA	0
76	Old Power Plant	3962576	10		Oil	4591	0.0	Ceramic Breaker	NA	0
76	Old Power Plant	3995083	10		Oil	4589	0.0	Ceramic Breaker	NA	0
76	Old Power Plant	3852971	10		Oil	4590	0.0	Ceramic Breaker	NA	0
48	Ornamental Horticulture East	2-53111 Removed 9/15/89	150		Inhibited Oil	2568	>500	OFC	2569	62.0 *
48	Ornamental Horticulture West	10392-1 removed 6/19/89	150		Oil	2570	0.0	OFC	2571	22.0
NA	Parker Ranch	9807778	15		NA	4865	3.0	Fuse cutouts	NA	0
H-2	Parking Lot H-2 AKA ES-58	69PA6558 removed 6/19/89	225		NA	4533	6.0	OFC	4534	19.0
H-2	Parking Lot H-2	5630083	10		NA	4858	0.0	fuse cutouts	NA	0
70	Plant Operations	9801220	10		Oil	4528	8.0	Ceramic breaker	NA	0
NA	Poly Canyon	MAD 0007	37.5		Oil	4599	4.0	OFC	4598	3.0
NA	Poly Canyon	15220-1	37.5		Oil	4596	1.0	OFC	4597	1.0
50	Poultry Unit	E9C1217	50		Oil	4544	1.0	Ceramic breaker	NA	0
50	Poultry Unit - west	E962388	25		Oil	4545	2.0	Ceramic breaker	NA	0
51	Presidents Residence	11853-1	112		Air Cooled	NA	0	OFC	4496	11.0
B-1	Rodeo Arena	9854738	15		10 CA Oil	4536	0.0	Ceramic cutout	NA	0
B-1	Rodeo Arena	9356370	15		10 CA Oil	4535		Ceramic cutout	NA	0
B-1	Rodeo Arena	9356358	15		10 CA Oil	4537	2.0	Ceramic cutout	NA	0
106	Santa Lucia Residence Hall	69961	150		Askarel	NA	>500	OFC	4461	4.0
52	Science	C169491	750		Pyranol	NA	>500	Air Breaker	NA	0
53	Science North	YCR-83241	500		Inerteen	NA	>500	OFC	4459	18.0
108	Sequoia Residence Hall	69960	150		Askarel	NA	>500	OFC	4460	3.0
17	Sewer Pump Station	258767-60K	10		Oil	4511	0.0	OFC	4797	1.0
17	Sewer Pump Station	258768-60K	10		Oil	4513	0.0	OFC	4797	1.0
17	Sewer Pump Station	258770-60K	10		Oil	4512	0.0	OFC	4797	1.0
54	Sheep Unit	S-57C0367	25		10 CA Oil	4539	38.0	Ceramic breaker	NA	0
54	Sheep Unit	S-56E2071	25		10 CA Oil	4538	0.0	Ceramic breaker	NA	0
54	Sheep Unit	9896084	25		10 CA Oil	4540	0.0	Ceramic breaker	NA	0
122	Shepherd Reservoir	6937089	25		10 CA Oil	4532	0.0	Ceramic breaker	NA	0

APPENDIX C

PHOTO LOG

Photo #1 View of the Environmental Horticultural Science (EHS) building entrance, facing east.

Photo #2 View of the chemical mixing area and floor drain at EHS Building 048-M, facing south.

Photo #3 View of chemical storage within Building 048-M (EHS), facing northwest.

Photo #4 View of chemical storage within Building 048-M (EHS), facing west.

Photo #5 View of chemical storage within Building 048-M (EHS), facing east.

Photo #6 View of chemical storage within Building 048-M (maintenance), facing southwest.

Photo #7 View of chemical storage within Building 048-M (maintenance), facing southwest.

Photo #8 View the pesticide tank south of Building 048-M, facing south.

Photo #9 View the pesticide tank south of Building 048-M, facing north.

Photo #10 View of gasoline and diesel storage within equipment sheds, facing east.

Photo #11 View of lawn mowers within a storage shed, facing northeast.

Photo #12 View of gasoline and diesel fuel storage east of the wood shop, facing west.

Photo #13 View of fertilizer storage south of the wood shop, facing east.

Photo #14 View of the interior of the Soil Science greenhouse, facing south.

Photo #15 View of the PCB-containing oil filled cutout (OFC) switch at the south end of the EHS buildings, facing north.

Photo #16 View of spray paints within the Soil Science greenhouse storage area, facing south.

Photo #17 View of a storm water drain at EHS, facing west.

Photo #18 View of the inside of one of the laboratory buildings, facing east.

Photo #19 View of equipment storage north of the wood shop, facing northeast.

Photo #20 View of horse stables north of EHS, facing north.

Photo #21 Additional horse stables west of EHS, facing north.

Photo #22 View of the greenhouse at the Crops Unit (CU), facing southeast.

Photo #23 View of tracker storage west of the CU greenhouse, facing east.

Photo #24 View of tracker storage and a pole-mounted transformer at the CU, facing east.

Photo #25 Material storage at the northern portion of the CU project area, facing north.

Photo #26 Western portion of the CU project area, facing southeast.

Photo #27 Pump station at the southern portion of the CU, facing south.

Photo #28 Pad-mounted transformer south of the pump station, facing west.

Photo #29 Inside of the Agricultural Pavilion, facing northeast.

Photo #30 Front of the residence near the Beef Unit, facing northeast.

APPENDIX D

QUALIFICATIONS

ELLIOT R. HARO
Principal Scientist

Mr. Haro is the founding principal of Haro Environmental, Inc. With over 14 years of experience in the environmental field, Mr. Haro has directed, managed and performed environmental site assessments and remediation activities. Mr. Haro's project management experience includes proposal and cost estimate preparation for site assessments and remediation projects, design of soil and groundwater remediation systems, in-house staff and subcontractor coordination, technical report preparation, and permit acquisition. Mr. Haro has managed and performed numerous Phase I and Phase II Environmental Site Assessments (ESAs) as well as site investigation and remediation field activities including air, soil, groundwater, and surface water sampling, groundwater monitoring well installations, and remediation system operations and maintenance. He has prepared various environmental reports including site assessment reports, feasibility studies, remedial/corrective action plans, remedial work plans and health-based risk evaluations. Mr. Haro is familiar with the regulatory process and has consulted with both local and regional agencies on Client's behalf for work plan approvals and modifications. Mr. Haro's technical expertise includes evaluation, design and implementation of innovative in-situ groundwater treatment technologies including enhanced bioremediation and in-situ chemical oxidation.

EXPERTISE

- Phase I and II Environmental Site Assessments
- Soil and Groundwater Investigations
- Soil and Groundwater Remediation
- Project Management
- Remediation Technology Evaluation
- Site Characterization
- Remediation System Operations and Maintenance
- Health Risk Evaluations
- Feasibility Studies
- Data Analysis and Management
- Construction Oversight
- Permitting – Environmental and Construction

WORK HISTORY

• Haro Environmental, Inc.	2013 to Present
• Equipoise Corporation	2007 to 2013
• Rincon Consultants, Inc.,	2004 to 2007
• TN & Associates	2003 to 2004
• Environmental Biotechnology Inst.	2002 to 2004
• Creek Environmental Laboratory	1999 to 2002

EDUCATION AND CERTIFICATIONS

- Registered Environmental Assessor I (REA I), California, No. 30228 (Former; DTSC discontinued the REA program effective July1, 2012)
- M.S., Agriculture – Soil Science Specialization, California Polytechnic State University, San Luis Obispo, CA
- B.S., Soil Science, California Polytechnic State University, San Luis Obispo, CA
- OSHA and EPA 40-hour safety training and 8-hour hazardous materials refresher courses

PROJECT DESCRIPTIONS

Retail Service Station Portfolio, Various Locations, CA

- Groundwater Monitoring and Sampling Management
- In-Situ Bioremediation
- Permitting
- Regulatory Agency Negotiations
- Quarterly Reporting
- Target compounds: Hydrocarbons and MTBE
- Interim Remedial Action Plans
- Remedial and Corrective Action Plans
- Health and Safety
- Remediation System Design
- Multiphase and Dual Phase Extraction Systems

Managed project activities for monitoring and cleanup of multiple gas station facilities throughout Northern, Central and Southern California. Evaluated in-situ and ex-situ treatment options for source zone reduction and off-site containment of contaminants. Performed and managed operations and maintenance activities on remediation systems and prepared quarterly remediation reports. Prepared quarterly groundwater monitoring reports for agency submittal and approval. Prepared corrective actions plans and remedial action plans for implementation of mobile high vacuum dual phase extraction, multi-phase extraction, and dual-phase extraction systems. Designed and permitted innovative groundwater remediation approaches including enhanced aerobic bioremediation using ORC®. Negotiated with overseeing agencies for acceptance of proposed remedial actions.

Phase I Environmental Site Assessment, Remediation Engineering Evaluation, & Indoor Air Quality Assessment, Former Aircraft Manufacturing Facility, Playa Vista, CA

- Phase I ESA
- Remediation System Performance Evaluation
- Historic Chlorinated VOC and Hydrocarbon Use
- 550,000 Square Feet of Building Space

Performed a Phase I ESA for an approximately 38-acre site developed with 8 historic structures totaling approximately 550,000 square feet. Historic aircraft manufacturing resulted in chlorinated VOCs and petroleum hydrocarbon impacts to soil and groundwater. Identified recognized environmental conditions (RECs) at 11 source areas. Consulted client on extent of environmental liabilities and potential

environmental costs. Evaluated the performance of the on-site dual-phase extraction system targeting identified source areas. Developed potential life-cycle costs for the existing remediation system, and costs for remediation of metals contaminated soil. Performed an indoor air survey to assess potential impacts from the historic aircraft manufacturing operations on indoor air quality. Indoor air study results were compared to published regulatory thresholds and calculated site-specific health risks.

Soil and Groundwater Remediation of Chlorinated Solvents using Chemical Oxidation, Former Aerospace Manufacturing Facility, Newbury Park, CA

- Groundwater Monitoring and Sampling Management
- In-Situ Chemical Oxidation using Potassium Permanganate
- Injection and Monitoring Well Installations
- Quarterly WDR Reporting
- Target compounds: Chlorinated VOCs
- Health and Safety Plan Preparation
- Lead Agency Negotiations

Managed in-situ chemical oxidation injections for remediation of soil and groundwater impacted with the chlorinated solvents TCE and PCE. Negotiated with the lead agency (LARWQCB) for revised Waste Discharge Requirements (WDR) and amendments to the original work plan. Developed and implemented a site-specific health and safety plan to protect the health and safety of workers and the environment from accidental exposure to the chemical oxidant. Oversaw the installation of 35 injection wells and 14 dual-nested monitoring wells, and the injection of approximately 12,000 pounds of potassium permanganate. Conducted performance evaluation sampling per WDR requirements, and prepared and submitted quarterly WDR monitoring reports to the regulatory agency.

Soil and Groundwater Remediation of Chlorinated Solvents, Soil Source Zone Removal and In-Situ Bioremediation, Former Industrial Facility, Los Angeles, CA.

- Groundwater Monitoring and Sampling Management
- Large Diameter Auger Excavation
- Enhanced Anaerobic Bioremediation
- Soil Vapor Survey
- Injection and Monitoring Well Installations
- Quarterly WDR Reporting
- Target compounds: Chlorinated VOCs
- Health and Safety Plan Preparation
- Lead Agency Negotiations

Managed soil and groundwater investigation and remediation activities for a site with soil and perched groundwater water zone with chlorinated hydrocarbons present. A Remedial Action Plan (RAP) was developed and approved by the LARWQCB to remediate soil and groundwater at the site. Because site constraints precluded the use of conventional excavation approaches without extensive shoring requirements, soil remediation activities included the design and implementation of source area soil removal using large diameter augers. Groundwater remediation activities included acquisition of a Waste Discharge Requirement (WDR) permit from the LARWQCB for injection of HRC® into the perched zone, injection design, and implementation of an Enhanced Anaerobic Biodegradation approach to stimulate by injecting HRC®.

RCRA Facility Closure, Former Hazardous Waste Handling Facility, Wilmington, CA

- Lead Agency: DTSC
- RCRA Hazardous Waste Permit Closure
- Port of Los Angeles Permitting
- Health and Safety Plan Preparation
- DTSC Approval of Work Plan Updates and Modifications

Managed work plan modification/updating and permitting for a closure of a RCRA hazardous waste permit under DTSC oversight. This former hazardous waste handling facility was the subject of an enforcement action by the lead regulatory agency and resulted in the conviction of the former operator. The chemicals associated with the facility included VOCs and petroleum hydrocarbons. Negotiated with DTSC for work plan modification resulting in a reduction of $70,000 in the sampling costs.

Feasibility Study, Former Aerospace Testing Facility, CA

- Chlorinated VOCs
- Emergent Compounds 1,4-dioxane and NDMA
- In-Situ and Ex-Situ Treatment Options
- Conforming to Lead Agency Requirements

Provided technical assistance for preparation of a feasibility study for remediation of a 2,800-acre former test site facility being closed after 50 years of storied operations. The feasibility study in part addressed the emergent chemicals 1,4-dioxane and N-nitrosodimethylamine (NDMA). These chemicals are somewhat recalcitrant in the environment and are the subject of research at many DOD-sponsored projects. Evaluated innovative remedial alternatives including enhanced aerobic bioremediation and in-situ chemical oxidation. Prepared a bench-scale work plan and reported the findings evaluating sodium persulfate and propane to reduce NDMA concentrations in groundwater.

Former Oil Field Sumps Assessment and Remediation, Santa Maria Valley, CA

- Sump Assessment and Remediation
- Remediation construction
- Target compounds: Metals, volatile and semi-volatile organics, hydrocarbons,
- Soil Excavation
- Health and Safety Plan Preparation

Project manager for sump assessment and remediation activities for multiple land leases within the Santa Maria Valley. Former oil field features were identified by reviewing historic maps and aerial photographs. The lateral and vertical limits of identified features were assessed in the field using direct push technology. Non-hazardous sump material was excavated and transported to a local landfill for reuse. Confirmation samples were collected and based on the results, closure reports were prepared and submitted to the lead oversight agency (County Santa Barbara Fire Prevention Division).

Operations and Maintenance, Ex-situ Bioremediation, San Luis Obispo, CA

- Groundwater monitoring well installation
- Groundwater sampling
- Remediation construction
- Vapor extraction system O&M
- Soil Excavation
- Field safety coordinator

Feasibility Study and Remedial Action Plan, Thousand Oaks, CA

- Project Coordinator
- Oversee field activities
- Permitting
- Conducted dual phase extraction events
- Managed and performed O & M

Site Investigations, Multiple Clients

- Oversee well installation
- Oversee boring installation
- Remediation construction
- Perform Monitoring and Optimization.
- Soil and Soil Vapor Sampling
- Risk Analysis
- Managed Subcontractors
- Construction

Publications

Roth, A. E., Lingle, E. L., Haro, E. R., Stark, J. M., Unkefer, P. J. and Kitts, C. L. 2005. *Sample Preservation Method and Storage Time Can Affect 16S rRNA Terminal Restriction Fragment Patterns Made From Soil DNA.* Soil Biology and Biochemistry.

TIMOTHY E. NELLIGAN
Principal Engineer

Mr. Nelligan has professional experience in the areas of environmental compliance, permitting, and remedial design engineering. He has conducted remedial investigations (RIs), feasibility studies (FSs), remedial design/remedial action (RD/RA), corrective action plans (CAPs) at several California State and Federal Superfund site, oil refineries, and other industrial facilities. He has also prepared Storm Water Pollution Prevention Plans (SWPPPs), Spill Prevention Containment and Countermeasures (SPCCs), Hazardous Materials Business Plans (HMBPs), and Wastewater Surcharge Statements. Mr. Nelligan has conducted various field activities including air, soil, groundwater, and surface water sampling; well design, installation, and development; and vapor extraction tests. He has designed, installed, operated, and conducted performance monitoring of in-situ and above ground soil-vapor extraction systems, and groundwater extraction and treatment systems. Mr. Nelligan has assisted in the design and implementation of innovative in situ technologies such as dual phase (air and groundwater) extraction, enhanced bioremediation using HRC and chemical oxidation systems using sodium permanganate to remediate sites. He has also designed vapor control systems for use in production facilities and assisted in managing a major coke disposal and lead fixation project.

EXPERTISE

- Project Management
- Soil and Groundwater Investigations
- Data Analysis and Management
- Remediation Technology Evaluation
- Engineering Design
- Construction Oversight
- Operation and Maintenance
- Cost Analysis
- Soil and Groundwater Remediation - Petroleum Hydrocarbons
- Soil and Groundwater Remediation - Metals
- Soil and Groundwater Remediation -Chlorinated Hydrocarbons
- Major Project Oversight
- Permitting - Environmental and Construction
- Feasibility Study/RAP Preparation

WORK HISTORY

• Haro Environmental, Inc.	2013 to Present
• Katahdin Environmental	2007 to Present
• Equipoise Corporation	1999 to 2007
• Harding Lawson Associates	1998 to 1999
• Chemical Data Management Systems	1997 to 1998

EDUCATION AND CERTIFICATIONS

- Registered Professional Engineer, California 2005, No. C68666
- B.S., Civil and Environmental Engineering, California Polytechnic State University, San Luis Obispo, 1998
- OSHA and EPA 40-hour safety training and 8-hour hazardous materials refresher courses

PROJECT DESCRIPTIONS

Superfund Site, Pesticide Reformulator, Bakersfield, CA

- Design Engineer
- Design Treatment System
- 250,000 Gal Wastewater and 4,000 Gal Sludge
- Oversee Treatment of Tank Contents
- Pesticides, Metals, and Semi-volatiles
- Lead Agency: US EPA

Soil remediation and FHP recovery system operation, Marine Terminal, Los Angeles Harbor, CA.

- Project Engineer
- Free Hydrocarbon Product (FHP)
- Petroleum Hydrocarbons/ BTEX in soil and groundwater
- MTBE in groundwater
- Lead in soil
- SVE with Offgas Treatment
- Thermal Oxidation of Offgas
- FHP Recovery with Pneumatic Pumps in 40 wells
- On-Site Soil Fixation of Lead
- Lead Agency: RWQCB – Los Angeles
- SCAQMD Compliance
- Recovered over 355,200 gallons of FHP to date.

Soil and Groundwater Remediation of Solvents. Excavation and InSitu BioRemediation, Former Dean Alco Site, Los Angeles, CA

- TCE and 1,1,1-TCA Source Area
- Soil Remediation through Excavation using Large Diameter Augers
- Source Area Tank Removal
- Perched Groundwater Remediation using HRC
- Implementation of InSitu BioRemediation Monitoring Program
- Permitting – Waste Discharge Requirement, Grading Permit, UST Removal Permit
- Lead Agency: RWQCB – Santa Ana
- SCAQMD Compliance
- UST Closure – LA Fire Department
- Assistant Project Manager

Coke Removal and Groundwater Extraction System O&M, Oil Refinery, Torrance, CA –

- Assistant Program Manager
- Free Hydrocarbon Product (FHP)
- Petroleum Hydrocarbons/ BTEX in groundwater
- MTBE in groundwater
- Coke Material in Soil
- Offsite Disposal of 60,000 tons of Coke Material
- Groundwater Extraction of 1200 gallons per minute
- FHP Recovery with Pneumatic Pumps
- Lead Agency: RWQCB – Los Angeles
- SCAQMD Compliance
- Groundwater treatment using Envirex - Fluidized Bed Reactor

Groundwater Remediation Using In-Situ Chemical Oxidation, Dry Cleaning Facility, Washington

- PCE in formation water
- Formation – Fractured Bedrock
- MTBE in groundwater
- Sodium Permanganate Injections
- Feasibility Study
- Remedial Action Plan
- Lead Agency – Department of Ecology, WA

APPENDIX F. TRIP GENERATION ESTIMATES

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Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

MEMORANDUM

Date: February 13, 2017

To: Jacqueline McCrory, SWCA Environmental Consultants

From: Joe Fernandez and Geiska Velasquez, CCTC

Subject: Cal Poly Oppenheimer Pavilion and Agricultural Event Center Trip Generation Estimates

This memorandum summarizes our trip generation estimates for the proposed development of the Oppenheimer Pavilion and Agricultural Event Center on the Cal Poly San Luis Obispo campus.

BACKGROUND

The Cal Poly Oppenheimer Pavilion and Agricultural Event Center project would improve the equine center, environmental horticultural sciences, beef unit, and crops unit areas on campus through a phased project approach. The project would construct a new 88,150 square feet agricultural event center, and relocate existing facilities on campus north of Highland Drive.

This study estimates the number of peak hour trips generated by the new facility to determine whether the project warrants further study under California State University (CSU) and City of San Luis Obispo transportation impact study guidelines. The purpose of this analysis is to inform the Initial Study underway for the project.

REGULATORY SETTING

The project would add traffic to transportation facilities operated by the California State University (CSU) system, Caltrans, and the City of San Luis Obispo. Excerpted standards relevant to the proposed project and study locations are summarized below.

California State University

The CSU *Transportation Impact Study Manual* provides guidance to help determine when a Transportation Impact Study (TIS) is required. This determination is based on responses to the transportation/traffic checklist questions included in Appendix G of the CEQA Guidelines. No specific trip generation threshold is provided which would require a TIS. Instead the need for a TIS is determined based on conflicts with applicable plans, ordinances, programs, or policies related to transportation.

City of San Luis Obispo

The City's *Multimodal Transportation Impact Study Guidelines* define when a TIS is required. Among other criteria, any project that would generate more than 100 peak hour automobile trips on City streets would have to prepare a TIS. The peak hour of travel in 2016 on Santa Rosa Street between the City Limit and Highland Drive is from 3:30-4:30 PM, with a two-way hourly volume of 2,636 vehicles. The two-way volume on this segment between 5:30-6:30 PM is 1,886 vehicles, or 72 percent of the peak hour volume.

Caltrans

The Caltrans *Guide for the Preparation of Traffic Impact Studies* provides guidance in determining if and when a TIS is needed. Among other criteria, when a project generates over 100 peak hour trips assigned to a State highway facility (such as State Route 1 at Highland Drive) a traffic study may be required.

TRIP GENERATION

The proposed facility does not conform to typical land uses with data in the Institute of Transportation Engineers' *Trip Generation Manual.* Trip generation for the site was developed in consultation with the project team and University staff, using information contained in the project description to determine the frequency, size, and duration of events.

We estimated the number of trips generated by the largest expected event using this information and in consideration of other available data related to travel behavior such as typical vehicle occupancy, transit availability, and travel demand management programs already in place.

The operational characteristics of such events are described below.

Oppenheimer Events

The event center is expected to hold approximately 30 special agricultural events per year, predominately during the regular school year. The events are proposed as follows:

- 15 weekend events will serve up to 750 attendees.
- Five weekday events starting after 6:00 PM will serve up to 1,000 attendees.
- Five weekday events starting after 6:00 PM will serve up to 1,500 attendees.
- Five campus-centric events (90 percent of attendees from on-campus locations) serving up to 1,000 attendees.

The largest events will serve up to 1,500 attendees up to five times per year. Because they will start after 6:00 PM, they will avoid the peak hour of travel on State Route 1/Santa Rosa Street, which occurs from 3:30-4:30 PM. The following assumptions were made to estimate trip generation for these largest events:

- Ten percent of the attendees will arrive and depart outside of the peak hour of the event.
- Ten percent of the attendees will be students living on campus who will not make a vehicle trip affecting off-campus roadways.
- Attendees will arrive by private vehicle with an average vehicle occupancy of 2.5 persons per vehicle.

Table 1 summarizes the trip generation estimate based on these assumptions.

Table 1: Off-Site Vehicular Trip Generation Estimates

Project Component	Size		Daily Trips	Maximum Hourly Trips					
				Event Start			Event End		
				In	Out	Total	In	Out	Total
Special Events[1]	1,500	Attendees	1,080	480	0	480	0	480	480

1. Special Events traffic assumed to have an average vehicle ridership of 2.5, per County Resolution 2008-152. 90% of attendees were assumed to arrive from off campus locations and enter within one hour and exit in one different hour.

Table 1 shows that a 1,500-person event would generate up to 480 trips during a single hour using the assumptions described above. These trips would occur outside of the peak hour of travel for adjacent streets, and would occur infrequently. Recommendations to minimize potential impacts of these trips are discussed at the end of this memorandum.

Crop Science Complex

This area encompasses approximately 5.5 acres located within the campus Crops Unit area and includes replacing a portion of the existing Crop Science Complex with a new farm store that would include research, production greenhouses, and associated support facilities to replace the greenhouse structures that would be demolished under Phase 2 of the project. This phase also includes the construction of new greenhouse and support facilities including a new fruit and vegetable processing and research facility, a new plant sciences teaching and research laboratory building, and a new storage facility for restricted products and equipment.

The existing Crop Science building would be retained and converted into a farm store where all agricultural products produced on campus can be sold in one place. This would include dairy, meat, eggs, processed food products, fruits and vegetables, ornamental plants, a tasting room for Cal Poly produced wine, beer, and spirits, and a dairy bar to serve ice cream products.

This component of the project would mostly consist of modernizing and upgrading existing uses that already occur on campus. Accordingly, improving these facilities is expected to generate insubstantial levels of new traffic.

RECOMMENDATIONS

The 30 special events could occur an average of three times per month during the school year. As proposed, the special events would occur outside of the peak hour of travel on adjacent streets.

We recommend incorporating Travel Demand Management (TDM) measures into the project description to minimize the vehicular trips associated with special events and provide travel options to attendees. Prior to operation of the new Agricultural Event Center, the University shall develop a TDM plan to ensure operational traffic associated with the recurring special events does not exceed 100 trips during the peak hour of adjacent streets. The TDM plan may include, but is not limited to, the following measures:

- Implement shuttle/transit service from off campus locations during special events. Likely pickup locations include hotels associated with the event, the downtown transit center, and on-campus housing complexes.
- Schedule arrivals/departures for exhibitors and participants with large vehicles and trailers to occur well before the event starts/ends and outside of the peak hour of adjacent streets to spread the event trips over a longer period of time and minimize the impacts of vehicles with trailers.
- Implement manual traffic control at on-campus intersections and signage directing attendees and participants to the appropriate parking and staging areas.
- Coordinate with Caltrans and the City of San Luis Obispo to schedule event start and end times outside of the peak travel periods on adjacent streets.
- Ensure special events do not occur simultaneously with other large events on campus, such as sporting events or cultural events at the Performing Arts Center.
- Inform event participants and attendees of shuttle service availability, parking, and other aspects of the TDM plan.
- Monitor and adjust the TDM plan following the initial events to effectively manage the transportation demand.

Please let us know if you have any questions.

APPENDIX G. MITIGATION MONITORING AND REPORTING PROGRAM

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MITIGATION MONITORING AND REPORTING PROGRAM

Statutory Requirement

When a Lead Agency makes findings on significant environmental effects, the agency must also adopt a "reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment" (Public Resources Code §21081.6(a) and CEQA Guidelines §15091(d) and §15097). The Mitigation Monitoring and Reporting Program (MMRP) is implemented to ensure that the mitigation measures and project revisions are implemented. Therefore, the MMRP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

Administration of the Mitigation Monitoring and Reporting Program

The Board of Trustees of the California State University (Board of Trustees) is the Lead Agency responsible for the adoption of the MMRP. The project applicants, California Polytechnic State University, San Luis Obispo (Cal Poly) Facilities Planning and Capital Projects Department and Peter and Mary Beth Oppenheimer, are responsible for implementation of the MMRP, in coordination with other identified entities. According to CEQA Guidelines §15097(a), a public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation. The Board of Trustees delegate responsibility for verifying and documenting compliance with the MMRP to the local campus, in this case, California Polytechnic State University, San Luis Obispo. Specifically, the Cal Poly Facilities Planning and Capital Projects Department, as coordinator of the project and its construction, will be responsible for compliance. However, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program.

Mitigation Measures and Reporting Program

The MMRP table is structured to enable quick reference to mitigation measures and the associated monitoring program based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures found in the Initial Study/Mitigated Negative Declaration for the Oppenheimer Pavilion and Agricultural Event Center Project.

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Mitigation Monitoring and Reporting Program

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Aesthetics			
AES-1	Lighting and Glare – All exterior lighting shall be hooded. No unobstructed beam of light shall be directed toward sensitive uses. The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls). All lights must be shielded to avoid glare and spillover onto adjacent areas and onto public right of way areas.	Verification through review and approval of independent lighting evaluation, plan check, and inspection	Prior to the approval of construction documents by CSU	Cal Poly
AES-2	Contractors will locate stockpiling and staging areas out of view where feasible.	Verification through review and approval of construction plans	Prior to the approval of construction documents by CSU	Cal Poly
AES-3	Prior to the approval of construction documents by CSU, a comprehensive lighting plan shall be submitted for review and approval for that phase. The lighting plan shall be prepared using guidance and best practices endorsed by the International Dark Sky Association. The lighting plan shall address all aspects of the lighting, including but not limited to all buildings, infrastructure, parking lots and driveways, paths, recreation areas, safety, and signage. The lighting plan shall also consider effects on wildlife in the surrounding area. The lighting plan shall include the following at a minimum: a. The point source of all exterior lighting shall be shielded from off-site views. b. Light trespass from exterior lights shall be minimized by directing light downward and utilizing full cut-off fixtures or shields. c. Lumination from exterior lights shall be the lowest level allowed by public safety standards. d. Exterior lighting shall be designed to not focus illumination directly onto exterior walls. e. Any signage visible from off-site shall not be internally luminated. f. Light trespass from interior and arena lights associated with the pavilion structures shall be minimized by directing light downward and utilizing full cut-off fixtures, shields, or recessed fixtures.	Verification through review and approval of independent lighting evaluation, plan check, and inspection	Prior to the approval of construction documents by CSU	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AES-4	Prior to the approval of construction documents by CSU, building plans and elevations shall be submitted for review and approval consistent with the following conditions: a. No highly reflective glazing or coatings shall be used on roofing materials. b. No highly reflective exterior finishes such as chrome, bright stainless steel or glossy tile shall be used on the south and west facing sides of the development where visible from off-site locations. c. No highly reflective glazing or coatings shall be used on west and south facing windows.	Verification through review and approval of building plans and elevations	Prior to the approval of construction documents by CSU	Cal Poly
	Air Quality			
AQ-1	Dust Control[1] A) Employ measures to avoid the creation of dust and air pollution. B) Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently. C) All unpaved roads shall be overlain with decomposed granite, class II or III road base material, or a similar material to prevent dust generation from unpaved roads. The applied road base material shall be maintained as necessary. D) Vehicle speeds on all unpaved roads shall be limited to 15 mph or less during construction and operation. E) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established. F) Store all volatile liquids, including fuels or solvents in closed containers. G) No open burning of debris, lumber or other scrap will be permitted. H) Properly maintain equipment to reduce gaseous pollutant emissions. I) Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible. J) Cover stockpiles of soil, sand and other loose materials. K) Cover trucks hauling soil, debris, sand or other loose materials. L) Sweep project area streets at least once daily. M) Appoint a dust control monitor to oversee and implement all measures listed in this Article. N) The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent	Verification through plan check and field inspection	Throughout the duration of construction activities	Cal Poly

[1] Dust control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOAPCD recommendations as provided in the SLOAPCD *CEQA Air Quality Handbook* (SLOAPCD 2012).

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	construction dust and debris from entering the adjacent areas. O) When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas. P) Water down the project site, access routes, and lay down areas whenever generate dust becomes a nuisance. Q) The campus reserves the right to request watering of the site whenever dust complaints are received. R) It shall be the university's sole discretion as to what constitutes a nuisance. In addition to the measure listed above, the following measures shall be implemented to reduce fugitive dust emissions generated during construction activities in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001): a. During construction, the amount of disturbed area shall be minimized. b. On-site vehicle speeds should be reduced to 15 miles per hour or less. c. Exposed ground areas that are left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established. d. After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized. e. All roadways associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading, unless seeding or soil binders are used. f. Rock pads and/or rumble strips (or similar) shall be installed where vehicles enter and exit unpaved areas onto streets, or trucks and equipment shall be washed off before leaving the site. g. All PM_{10} mitigation measures shall be shown on grading and building plans. h. The contractor or builder shall consider the use of a SLOAPCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. i. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the SLOAPCD's limit of 20 percent opacity for greater than 3 minutes in any 60 minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person(s) shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.			

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AQ-2	Equipment Emission Control[2] a. On-road diesel vehicles shall comply with Section 2485 of Title 13 or the California Code of Regulations. This regulation limits idling from diesel-fueled commercial vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles: – Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and – Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation. b. Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation. c. The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturer's specifications. d. The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel. e. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation. f. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation. g. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance. h. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit. i. Electrify equipment when feasible. j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible.	Verification through plan check and field inspection	Throughout the duration of construction activities	Cal Poly

[2] Equipment emission control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOAPCD recommendations as provided in the SLOAPCD *CEQA Air Quality Handbook* (SLOAPCD 2012).

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	k. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel. l. No on or off-road diesel equipment shall be allowed to idle within 1,000 feet of sensitive receptors. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the idling restrictions limit. To the extent feasible, no equipment staging areas shall be located within 1,000 feet of any sensitive receptors. m. Proposed truck routes shall be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.			
AQ-3	In the event materials potentially containing asbestos are to be disturbed or removed from the project site, the Construction Contractor shall comply with the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
AQ-4	The presence or absence of naturally-occurring asbestos must be determined prior to start of soil disturbing activities. If Naturally Occurring Asbestos (NOA) is not present on-site, an exemption request will be filed with the SLOAPCD. If NOA is present on-site, the project will comply with all requirements outlined in the Asbestos Airborne Toxic Control Measures. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the SLOAPCD.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of geologic evaluation	Prior to ground disturbance and project construction	Cal Poly
AQ-5	Prior to ground disturbance and construction, the Construction Contractor shall ensure a geologic evaluation is conducted to determine if the area disturbed is exempt from the Air Resources Board Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105). If the site is not exempt from the ATCM requirements, the Construction Contractor shall comply with all requirements outlined in the Asbestos ATCM, which may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the SLOAPCD.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of geologic evaluation	Prior to ground disturbance and project construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AQ-6	Prior to ground disturbance and construction, the Construction Contractor shall obtain all required permits for the use of portable equipment, 50 horsepower or greater, from the SLOAPCD.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of geologic evaluation	Prior to ground disturbance and project construction	Cal Poly
AQ-7	Prior to operation of the project, Cal Poly shall obtain all required operational permits from the SLOAPCD.	Verification through review and approval of required permits and consultation with the San Luis Obispo Air Pollution Control District	Prior to operation of the project	Cal Poly
AQ-8	If during demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. Depending on the removal method, an APCD permit may be required. Contact the SLOAPCD Engineering and Compliance Division at (805) 781-5912 for more information. For additional information regarding lead abatement, contact the San Luis Obispo County Environmental Health Department at (805) 781-5544 or Cal-OSHA at (818) 901-5403. Additional information can also be found online at www.epa.gov/lead. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
AQ-9	On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles: a. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	location, except as noted in Subsection (d) of the regulation; and, b. Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.			
AQ-10	The following measures shall be implemented to reduce construction-generated emissions from construction equipment: a. Maintain all construction equipment in proper tune in accordance with manufacturer's specifications; b. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road); c. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy duty diesel engines, and comply with the State Off-Road Regulation; d. Idling of all on- and off-road diesel-fueled vehicles shall not be permitted when not in use. Signs shall be posted in the designated queuing areas and or job site to remind drivers and operators of the no idling limitation. e. Electrify equipment when possible; f. Substitute gasoline-powered in place of diesel-powered equipment, when available; and, g. Use alternatively fueled construction equipment on-site when available, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
AQ-11	The following measures shall be implemented if special events will require access via an unpaved road: On the day(s) of a special event: a. Any unpaved site (access road(s)/driveway(s)) that will be used for the special event shall be maintained with a SLOAPCD-approved dust suppressant (see Technical Appendix 4.3 of the SLOAPCD's CEQA Handbook) such that fugitive dust emissions do not exceed the SLOAPCD 20% opacity limit for greater than 3 minutes in any 60-minute period (APCD Rule 401) or prompt nuisance violations (APCD Rule 402). b. Designated parking locations shall be: 1. Paved when possible; 2. Planted and maintained with fast germinating non-invasive grass or low cut dense vegetation; or, 3. Maintained with a dust suppressant such that fugitive dust emissions to not exceed the SLOAPCD 20% opacity limit or create nuisance.	Include in project specifications; verify compliance in field through inspection	During operation	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AQ-12	If the project's access involves a City- or County-owned and maintained road, the applicant shall work with the applicable Public Works Department to ensure that the mitigation follows the agency's road standards for that section of road. The applicant may propose alternative measures of equal effectiveness by contacting the SLOAPCD's Planning, Monitoring & Outreach Division at (805) 781-4667.	Include in project specifications; verify compliance in field through inspection	During operation	Cal Poly
	Biological Resources			
BR-1	Prior to construction of the proposed bridge over the Drumm Reservoir drainage, the University shall prepare project specific plans for the bridge crossing. If the bridge crossing requires any earthwork within the banks of the drainage, the University shall enter into a Streambed Alteration Agreement with CDFW and obtain a Waste Discharge Requirement authorization from RWQCB. If the bridge project spans the banks of the drainage and avoids all ground disturbing activities between the drainage banks, regulatory permitting may not be necessary.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to construction of the proposed bridge over the Drumm Reservoir drainage	Cal Poly
BR-2	Prior to construction, the University should design the proposed south eastern detention basin and the proposed fill area in Phase 1 of the project to avoid the jurisdictional boundaries of Shepard and Smith reservoirs. Avoidance of the jurisdictional areas can be achieved by shifting the detention basin to the northeast so that it is outside of the riparian boundary of Smith Reservoir and ensuring that the proposed fill around Shepard Reservoir does not extend north of the Shepard Reservoir access road. If these design changes are not feasible, the University shall coordinate with CDFW, USACE, and RWQCB to obtain the appropriate permits for direct impacts to the jurisdictional features.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to construction	Cal Poly
BR-3	Prior to construction, the University shall retain a qualified biological monitor. The biological monitor shall prepare a monitoring plan for review and approval by the University. Full-time monitoring will occur during vegetation removal, and erosion control installation. Monitoring may be reduced to part time once construction activities are underway and the potential for additional impacts are reduced. The plan shall include, but not be limited to: a. Goals, responsibilities, authorities, and procedures for verifying compliance with environmental mitigation measures; b. Lines of communication and reporting methods; c. Daily and weekly reporting of compliance; d. Authority to stop work, and the conditions that would require such action; and e. Action to be taken in the event of non-compliance.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain biological monitor; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
BR-4	Upon preparation of construction plans, and prior to ground disturbance, the plans shall delineate "Environmentally Sensitive Areas" to protect the reservoirs, the reservoir drainages, and the Stenner Creek riparian area. The Environmentally Sensitive Area shall be demarcated by and wholly include the outer extent of riparian vegetation in drainages and Stenner Creek. Highly visible temporary construction fencing shall be installed along the boundary of the "Environmentally Sensitive Areas" and shall remain in place until the biological monitor recommends removal. No ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Areas." All project site designs shall incorporate a minimum 30 feet buffer from the Environmentally Sensitive Areas where no structures or other impermeable surfaces may be installed.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
BR-5	To avoid the potential to adversely modify stormwater and ground water inputs to Steelhead Critical Habitat in Stenner Creek, Phase IV of the project shall not include drilling any new wells in the Plant Sciences Study Area. In addition, if the proposed project increases the area of impermeable surfaces in the Plant Sciences Study Area, the project designs shall ensure that all stormwater is captured and retained on-site in such a way that the captured stormwater is allowed to percolate into the Stenner Creek system. The project shall not include direct or point source outfalls into the Stenner Creek riparian corridor, but may include stormwater detention basin(s) that allow captured stormwater to percolate on-site. If the proposed project cannot avoid modifications to the hydrologic inputs to Steelhead Critical Habitat in Stenner Creek, the University shall conduct and prepare a hydrologic study that evaluates and quantifies the project's potential to adversely affect hydrologic inputs to Stenner Creek. Upon completion of the study, the University shall consult with National Marine Fisheries Service to determine if the proposed project would adversely modify Steelhead Critical Habitat. If Agency coordination determines the project would result in adverse impacts to Steelhead Critical Habitat as designed, the University shall incorporate National Marine Fisheries Service recommendations into project design to avoid adverse impacts.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
BR-6	To avoid the potential for take of California red-legged frog that may disperse through the Phase 1 horse pastures, all initial ground disturbing activities in the Phase 1 area between Shepard Reservoir and Smith Reservoir and in the horse paddocks southeast of Smith Reservoir shall be completed in the dry season (between June 1st and September 31st). Initial grading activities in these areas shall not occur after the first fall rains and before May of any year.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
BR-7	Prior to initiation of construction and demolition activities, the biological monitor shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the special-status species potentially present in the area, jurisdictional habitats present proximate to the project site, California red-legged frog and its habitat, the specific measures that are being implemented to protect special-status species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.	Include in project specifications and denote on plans where needed; conduct training session; verify compliance in field through inspection	Prior to initiation of construction and demolition activities.	Cal Poly
BR-8	Prior to tree removal and building demolition, the biological monitor shall inspect the trees and buildings to be removed for the presence of roosting bats. The pre-disturbance surveys shall include two day-time and two dusk inspections and shall be conducted by qualified biologists no more than 30 days prior to the tree removal or building demolition. The biologist(s) conducting the pre-construction surveys will also identify the nature of the bat utilization of the area (i.e., no roosting, night roost, day roost, maternity roost). If bats are found to be roosting, project activities shall be delayed until the bats have left the area.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to tree removal and building demolition	Cal Poly
BR-9	All refueling, maintenance and staging of equipment and vehicles shall occur at least 60 feet from wetland habitat, riparian areas, or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. The monitor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the University shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take shall a spill occur.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly
BR-10	Project areas to remain undeveloped shall be revegetated with an assemblage of vegetation suitable for the area. Invasive, exotic plants shall be controlled to the maximum extent practicable.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Following completion of construction activities.	Cal Poly
BR-11	Prior to and during construction, the qualified biologists shall conduct surveys for silvery and black legless lizards in the coastal scrub located adjacent to Shepard Reservoir. The qualified biologists shall capture and relocate any SSC species (if present) or other native species to suitable habitat outside of the area of impact. If discovered, observations of SSC species or other special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to and during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
BR-12	Prior to construction, if construction activities are proposed to occur during the typical nesting season (which is February 15 to August 31) within 200 feet of potential nesting habitat, a nesting bird survey shall be conducted by qualified biologists no more than two weeks prior to construction to determine presence/absence of nesting birds within the project area. Work activities shall be avoided within 100 feet of active passerine nests and 200 feet of active raptor nests until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. The University shall be contacted if any state or federally listed bird species are observed during surveys. Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain biological monitor, as necessary; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly
BR-13	Vegetation removal in potential nesting habitats shall be monitored and documented by the biological monitor(s) regardless of time of year.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain biological monitor, as necessary; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly
BR-14	During construction, the biological monitor shall ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain biological monitor, as necessary; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Cultural Resources			
CR-1	Prior to any impacts to the Mare Barn (Building 032-O), the following shall occur: a. The following interior and exterior documentation of the Mare Barn (Building 032-O) shall occur: – Floor plans and elevations; – Interior and exterior descriptive analysis; and, – Creation of a photographic record. b. The cupola and iron gate (at least one gate) features shall be preserved and retained by the University. The cupola shall be repurposed as an interpretive exhibit within the Equine Unit or Environmental Horticultural Science Unit on campus. The iron gate shall be retained and preserved by the University, either in the archives, or for future re-use. c. In-depth interviews shall be conducted with early members of the Equestrian Science program that are familiar with the construction of the structure, if feasible.	Include in project specifications and denote on plans where needed; prepare interior and exterior documentation; preserve cupola and gate features; conduct interviews; verification through review and approval of documentation and interviews and verification of cupola and gate preservation of cupola and gate features.	Prior to any impacts to the Mare Barn (Building 032-O)	Cal Poly
CR-2	Prior to ground disturbance, the University shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior Professional Qualification Standards for archaeology. The archaeological monitor and a Chumash representative shall be present during initial vegetation clearing, site "grubbing," and grading in previously undisturbed project areas for each project phase. This will allow for the identification of any previously unidentified resources that may be visible on the ground surface. The presence of the archaeological monitor shall be limited to initial construction activities until a determination is made in the field by the archaeological monitor whether additional archaeological resources are present. The archaeological monitor shall submit a monitoring report to the University following completion of all required monitoring activities.	Retain archaeological and Native American monitors; prepare and comply with monitoring plan; document compliance in monitoring reports, as necessary	Prior to ground disturbance	Cal Poly
CR-3	In the event unknown archaeological resources are exposed or unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the archaeologist determines that the resource is an "historic resource" or "unique archaeological resource" as defined by California Environmental Quality Act Guidelines Section 15064.5 and avoidance is not feasible, further evaluation by the archaeologist shall occur. The archaeologist's recommendations for further evaluation may include a Phase II testing and evaluation program to assess the significance of the site. Resources found not to be significant will not require mitigation. Impacts to sites found to be significant shall be mitigated through implementation of a Phase III data	Retain archaeological and Native American monitors; prepare and comply with monitoring plan; document compliance in monitoring reports, as necessary	Throughout the duration of construction activities, as necessary	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	recovery program. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall monitor any mitigation work associated with prehistoric cultural material.			
CR-4	Upon preparation of construction plans, the plans shall delineate a buffer surrounding the boundaries of the documented archaeological site (CA-SLO-2280). The area shall be labeled as an "Environmentally Sensitive Area". Highly visible temporary construction fencing shall be installed along the boundary of the 50-foot buffer, and shall remain in place until the archaeological monitor recommends removal. If feasible, no ground disturbance, construction worker foot traffic, storage of materials, or storage or use of equipment shall occur within the "Environmentally Sensitive Area". Archaeological monitoring shall occur during all construction activities occurring within 50 feet of the boundary of prehistoric archaeological site CA-SLO-2280. Upon completion of archaeological monitoring, an archaeological monitoring report shall be prepared and submitted to Cal Poly and the Central Coast Information Center at the University of California Santa Barbara.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
CR-5	Prior to issuance of grading and construction permits, an Archaeological Monitoring Plan shall be prepared by a qualified archaeologist. The plan shall include, at minimum: a. List of personnel involved in the monitoring activities including a Native American monitor; b. Clear identification of what portions of the project area in relation to CA-SLO-2280 shall be monitored; c. Description of how the monitoring shall occur; d. Description of monitoring frequency; e. Description of resources expected to be encountered; f. Description of circumstances that would result in the "work diversion," in the case of discovery, at the project site; g. Description of procedures for diverting work on the site and notification procedures; and h. Description of monitoring reporting procedures.	Include in project specifications and denote on plans where needed; retain qualified archaeologist to prepare Archaeological Monitoring Plan; verify through review and approval of Archaeological Monitoring Plan	Prior to final specification and plan approval; field check during construction	Cal Poly
CR-6	If soil excavation associated with grading activities requires disturbance of bedrock formations, a qualified paleontologist will be retained to monitor construction activities in those areas. Should any vertebrate fossils or potentially significant finds (e.g., numerous well-preserved invertebrate or plant fossils) be encountered during work on the site, all activities in the immediate vicinity of the find shall cease until the qualified paleontologist evaluates the find for its scientific value. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. If monitoring is required, the qualified paleontologist shall submit a monitoring report to the University following	Include in project specifications and denote on plans where needed; verify compliance through review and approval of identified extent of grading/potential to disturb bedrock prior	Throughout the duration of construction activities, as necessary	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	completion of all required monitoring activities.	to project construction; retain paleontological monitors; prepare and comply with monitoring plan; document compliance in monitoring reports, as necessary		
CR-7	If human remains are unearthed, the University and contractor shall comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo (County) Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Throughout the duration of construction activities, as necessary	Cal Poly
	Greenhouse Gas Emissions			
GHG-1	The following measures shall be implemented to reduce GHG emissions associated with project construction and operation. These measures shall be shown on grading and building plans: a. Divert 65 percent of non-hazardous construction or demolition debris for recycling/reuse. b. Install low-flow water fixtures and other water conservation measures sufficient to meet, at a minimum, CalGreen Tier 1 standards for water efficiency and conservation. c. To the extent locally available, utilize pre-finished building materials or materials that do not require the application of architectural coatings. d. Install energy-efficient appliances and building components sufficient to achieve overall reductions in interior energy use beyond those required at the time of development by CalGreen standards. e. Utilize high efficiency lights in parking lots, streets, and other public areas. f. New buildings shall be designed to accommodate rooftop solar photovoltaic systems. g. On-site animal manure should, to the extent possible, be diverted to generate energy. h. Plant drought tolerate landscaping and incorporate water-efficient irrigation systems	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Throughout the duration of construction activities, as necessary	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	where necessary. i. Provide on-site facilities for the collection of recyclable materials. j. Provide a designated parking space for alternatively fueled, carpool, or vanpool vehicles within the Phase 3 parking area. k. The project site shall be designed to minimize barriers to pedestrian access, internally links all uses, and connects to all existing or planned external streets, public transit, and pedestrian facilities contiguous with the project site. l. Implement traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.).			
	Hazards and Hazardous Materials			
HM-1	Prior to the commencement of construction activities associated with each phase of the proposed project, the contractor shall submit a site-specific spill response plan to the University for review and approval, which shall include the following elements: a. General information including: 1. Name and location of the project; description of facility operations; construction manager and emergency coordinator names and phone numbers. 2. Description of what is stored at the facility (contents and volume). 3. Site diagram showing: hazardous materials storage areas; drains and culverts; surface waters and natural drainages; buildings; and surrounding land uses within 1,000 feet of the project site boundary. b. A description of prevention measures to be taken at the project site, such as secondary containment, employee training, and proper storage. Products shall be kept in their original containers with the original manufacturer's label and resealed when possible, and the manufacturer's recommendation for proper disposal shall be followed. The contractor shall perform routine inspections to ensure that all materials onsite are being stored and disposed of in an appropriate fashion. c. Preparedness: A description of the planned onsite equipment for spill response and its location. Spill clean-up materials and equipment appropriate to the type and quantity of hazardous materials shall be located onsite and personnel made aware of their location. Key employees shall be trained in spill response procedures in accordance with local, State, and federal regulations. Material safety data sheets (MSDSs) shall be kept onsite during construction and operation of the project. Spill response materials including brooms, dust pans, mops, rags, gloves, absorbent pads/pillows/socks, sand/absorbent litter, sawdust, and plastic and metal containers will be kept onsite. The spill response plan shall also specify: 1. The University's Hazardous Materials Management and Response Plan and spill response training.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of the Spill Response Plan and in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	2. Local, state, and federal regulatory agency reporting procedures and phone numbers, as well as emergency response contractor contact information and local hospital contact information. d. Response Procedures: An outline of emergency response procedures, including physical spill clean-up procedures, reporting requirements, and stabilization techniques. Spill guidelines shall include the following: 1. All spills shall be immediately cleaned up upon discovery; 2. The spill area shall be kept well ventilated and personnel shall wear the appropriate protective clothing to prevent injury when cleaning up a spill; 3. Reportable quantities of spills of hazardous materials shall be reported to the appropriate local, state, and federal authorities. 4. All vehicles leaking oil or fluids shall be scheduled for maintenance, and drip plans shall be placed under the leak when parked prior to the maintenance event. 5. A list of contact information for the appropriate local, state, and federal authorities shall be located in the transformer oil and hazardous materials transportation vehicle(s) at all times. Transformer oil spills during transportation shall be immediately reported to the appropriate local, state, and federal authorities.			
HM-2	If construction of the proposed project requires existing soils in the vicinity of the Crops Unit, the existing pesticide above-ground storage tank, or the former evaporation pond to be removed and/or disposed of off-site, the University shall collect a limited number of soil samples from the area(s) and test them for pesticides, herbicides, and heavy metals to determine if the soils require special handling and disposal methods.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to construction in the vicinity of the Crops Unit, the existing pesticide above-ground storage tank, or the former evaporation pond the Crops Unit	Cal Poly
HM-3	Prior to demolition of the Environmental Horticultural Unit buildings, the old OFC switch with the elevated PCBs should be removed and disposed of in accordance with all applicable rules and regulations.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to demolition of the Environmental Horticultural Unit buildings	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
HM-4	During the construction and operational phases of the project, if herbicides are used to manage vegetation onsite, the contractor or personnel applying herbicides shall comply with all state and local regulations regarding herbicide use. Herbicides shall be mixed and applied in conformance with the product manufacturer's directions. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets (MSDSs) for all hazardous materials to be used. To minimize harm to wildlife, livestock, vegetation, and waterbodies, products identified as non-toxic to birds, small mammals, and livestock shall be used, and herbicides shall not be applied within 60 feet of any surface waterbody when water is present. Herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
HM-5	Prior to the commencement of construction activities associated with each phase of the proposed project, a State Fire Marshall-approved or Cal Fire-approved fire safety plan shall be prepared for use during construction and operation. The fire safety plan shall contain notification procedures and emergency fire precautions including, but not limited to, the following: a. Identification of a water source for fire suppression, including onsite water storage for immediate use if necessary. b. Maintained vegetation clearance including a 30-foot clearance around onsite building(s) and 10-foot clearance around all other onsite structures. c. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. d. Light trucks and cars with factory installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. Said vehicle types shall maintain their factory installed (type) muffler in good condition. e. Fire rules shall be posted in an area visible to employees. f. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials. g. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats. h. Smoking shall be prohibited within the construction site.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of the Fire Safety Plan and through consultation with Cal Fire	Prior to final specification and plan approval; field check during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Hydrology and Water Quality			
HYD-1	Prior to the commencement of construction activities associated with each phase of the proposed project, the University shall prepare a drainage plan and supportive hydrologic analysis demonstrating compliance with the following or equitable measures to maximize groundwater recharge and maintain existing rain event flow rates and patterns: a. Off-site runoff shall not exceed existing flow rates during storm events. b. If required to maintain the current flow rate, detention/retention basins shall be installed to reduce local increases in runoff, particularly on frequent runoff events (up to 10-year frequency). c. If proposed, drainage discharge points shall include erosion protection and be designed such that flow hydraulics exiting the site mimics the natural condition as much as possible. d. Drainage from impervious surfaces (e.g., roads, driveways, buildings) shall be directed to a common drainage basin. e. Where feasible, grading and contouring shall be done in a way to direct surface runoff towards the above-referenced basins (and/or closed depressions).	Include in project specifications and denote on plans where needed; verify compliance through review and approval of the Drainage Plan	Prior to final specification and plan approval; field check during construction	Cal Poly
HYD-2	Prior to the commencement of construction activities associated with each phase of the proposed project, drainage control and erosion control Best Management Practices (BMPs) shall be shown on all applicable construction plans. During construction, all grading activities shall occur during the dry season months, which are typically May through October. Alternatively, a settling pond shall be installed on the construction site with sufficient capacity to contain expected runoff during a rainfall event and located to be able to catch all runoff from the 'active' area. If construction occurs during wet season months, which are typically November through April, all construction activities shall cease during rainfall events when rutting occurs across greater than 10 percent of a road or when rills more than 10 feet in length develop and lead off the road surface in the work area. The construction manager/contractor shall be responsible for suspending construction activities until the rainfall event has ceased and repairs to the rutting and/or rilling damage have been implemented. Approved drainage control and erosion control BMPs shall be in place prior to the typical wet season months (November 1).	Include in project specifications and denote on plans where needed; verify compliance through review and approval of the Fire Safety Plan and through consultation with Cal Fire	Prior to final specification and plan approval; field check during construction	Cal Poly
HYD-3	Prior to the commencement of construction activities associated with each phase of the proposed project, a Sedimentation and Erosion Control Plan shall be prepared as a supplement to the project's required SWPPP to minimize potential downstream sedimentation. This Plan shall minimize the potential for project sediment to leave the project site and its components shall be incorporated into all applicable construction plans. During construction, at a minimum, straw wattles (or comparably effective devices [as determined by the onsite Civil Engineer, in consultation with the University]) shall be placed on the downslope sides of the proposed work which would direct flows into	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	temporary sedimentation basins. This shall be checked and maintained regularly and after all larger storm events. All remedial work shall be done immediately after discovery so sedimentation control devices remain in good working order during the entire construction phase.			
HYD-4	Prior to the commencement of construction activities associated with each phase of the proposed project, the construction manager/contractor shall identify the location of all fuels and hazardous materials storage areas on construction plans. Storage of fuels and hazardous materials shall be prohibited within 200 feet of surface water features, drainage swales, actively farmed agricultural areas, and private groundwater supply wells, and within 400 feet of community or municipal groundwater supply wells (if it is determined that such wells exist on or in close proximity to the project site).	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly
HYD-5	During ground-disturbing activities, construction, and operation, all vehicles and equipment, including all hydraulic hoses, shall be maintained in good working order so that they are free of any and all leaks that could escape the vehicle or contact the ground, and to ensure that any leaks or spills during maintenance or storage can be easily and properly removed.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Throughout ground-disturbing activities, construction, and operation	Cal Poly
	Noise			
N-1	Cal Poly shall apply the following during construction: **Cal Poly Standard Requirements** A) The requirements of the Article are in addition to those of Article 4.02 of the Contract General Conditions. B) Maximum noise levels within 1,000 feet of any classroom, laboratory, residence, business, adjacent buildings, or other populated area; noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet. C) Equipment: equip jackhammers with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a "whisperized" compressor. Compressor hoods shall be closed while equipment is in operation. Use electrically powered rather than gasoline or diesel powered forklifts. Provide portable noise barriers around jack hammering, and barriers constructed of 3/4-inch plywood lined with 1-inch thick fiberglass on the work side. D) Operations: keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection	Throughout the duration of construction activities	Cal Poly

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	have properly functioning mufflers. E) Scheduling: schedule noisy operations so as to minimize their duration at any given location, and to minimize disruption to the adjoining users. Notify the Trustees and the Architect in advance of performing work creating unusual noise and schedule such work at times mutually agreeable. F) Do not play radios, tape recorders, televisions, and other similar items at construction site. G) When work occurs in or near occupied buildings, the Contractor is cautioned to keep noise associated with any activities to a minimum. If excessively noisy operations that disrupt academic activities are anticipated, they must be scheduled after normal work hours. H) All work in the area of the residence halls will be restricted to 10:00 a.m. to 10:00 p.m., seven days per week, throughout the year. No work will be allowed in the residence hall areas during the finals week. University reserves the right to stop construction work, including but not limited to noisy work, during the following events: Spring and Winter Commencement, Open House, Finals Week, residence hall move-in, or at other times that may be identified by the University. University reserves the right to stop noisy work at any time when said work disrupts classes or other planned events.			
	Transportation/Traffic			
TR-1	Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.	Verification through review and approval of Circulation Plan, plan check, and inspection	Prior to operation	Cal Poly